



Regional Recovery Framework for a Biological Attack in the Seattle Urban Area

September, 2010

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Prepared for the Interagency Biological Restoration Demonstration Program, jointly funded by the Department of Defense, Defense Threat Reduction Agency, and the Department of Homeland Security, Science & Technology Directorate

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1.0 - Framework Summary

This Regional Recovery Framework for a Biological Attack in the Seattle Urban Area (the Framework) is a product of collaboration between the Seattle Urban Area Security Initiative (UASI) partners and Joint Base Lewis-McChord (JBLM) with support from the U.S. Department of Homeland Security (DHS) and the Defense Threat Reduction Agency (DTRA).¹ The goal of the Framework is to reduce the time and resources required to recover and restore wide urban areas, military installations, and other critical infrastructures following a biological incident, by providing a coordinated systems approach. Because an anthrax attack is likely to be multi-jurisdictional in its impacts, recovery efforts should be standardized regionally to the greatest extent possible. The successful recovery of one area at the expense of another area in the region is counter-productive because the stigma may remain over the region until all areas have been recovered. The recovery strategy in a region must foster coordination and cooperation among all entities. Recovery cannot be a competitive process.

This Framework includes planning assumptions, roles and responsibilities, expectations, and key decisions that may need to be addressed along with a process for resolving difficult issues as recovery proceeds. This Framework also includes a set of ten Concepts of Operations (ConOps) that address critical challenges the region may need to address as recovery proceeds. The Framework can serve as the basis for developing standard operating procedures (SOPs) in each jurisdiction.² It does not address the response phase of the incident.

¹ The Department of Defense's (DOD) DTRA collaborated with DHS to launch the Interagency Biological Restoration Demonstration (IBRD) program. While much work has been accomplished over recent years to better understand the initial exposure and response phases of a biological release in the areas of detection, characterization, and coordination, little has been explored concerning wide-area recovery. The IBRD program was developed to help address this need. The IBRD program was designed to take a collaborative approach among regional stakeholders in the Seattle urban area and the federal agency partners to develop and deliver solutions that are tailored to the needs of the Pacific Northwest Region, yet extensible to other regions.

² This Framework is scalable and intended for use as an annex to the Regional Catastrophic Planning Grant (RCPG) All-Hazards Recovery Plan, which includes the eight counties in the Puget Sound region and JBLM. However, pending completion of the RCPG All-Hazards Recovery Plan, this recovery framework will serve as a standalone document.

2.0 - Purpose, Scope, Situation and Assumptions

2.1 - Purpose

The mission of recovery³ is to maintain and ensure the health and safety of the general public while expediting the remediation, restart, and recruitment of businesses into the impacted region so life returns to a “new normal.”⁴

The purpose of this document is to provide a recovery framework for the Seattle UASI, including JBLM (Figure 1 - Seattle Urban Area). It is also intended to supplement the all-hazards planning effort of the RCPG eight-county region when that effort is completed. Although the Framework is specific to a catastrophic, wide-area biological attack using anthrax in the Seattle UASI and JBLM, it is designed to be flexible and scalable so it can also serve as the recovery framework for other chemical or biological incidents. This document follows Federal Emergency Management Agency (FEMA) guidance from Comprehensive Planning Guidance (CPG) 101. It describes the recovery framework – assumptions, roles and responsibilities, expectations, key decisions that may need to be made, and a process for resolving key issues. The Framework can serve as the basis for developing SOPs in each jurisdiction, drawing from technical guidance and other jurisdictional plans (Figure 2 - Role of the Framework).

Planning for recovery should begin on the first day following an incident (Figure 3 - Simple ConOps Timeline for a simple conceptual graphic of recovery). Long-term recovery should remain a major planning goal, but, until an area is secured by law enforcement and deemed ready for characterization, life-saving operations should remain the number one priority.

- This recovery framework does **not** address issues of immediate response and communications.

³ **Recovery** - the development, coordination, and execution of service – and site – restoration plans; the reconstitution of government operations and services; individual, private-sector, nongovernmental, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, environmental, and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents. See: FEMA. “The Draft National Recovery Framework.” February 10, 2010.

<http://www.fema.gov/recoveryframework/>

⁴ The “new normal” is a moving target and refers to the understanding that the region will never return completely to its pre-disaster form. The landscape of business will change, population may shift significantly, demographics will shift, and many other factors will change. The new normal should be defined to understand when execution of the plan is completed.

Figure 2 - Role of the Framework

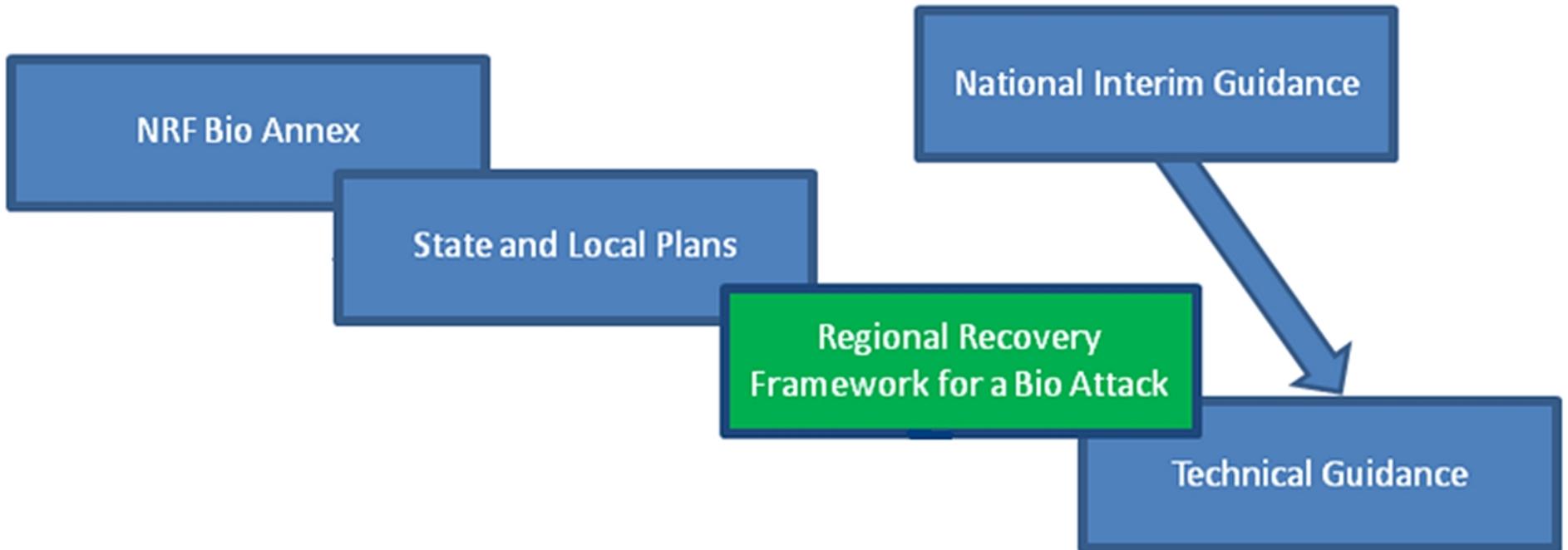
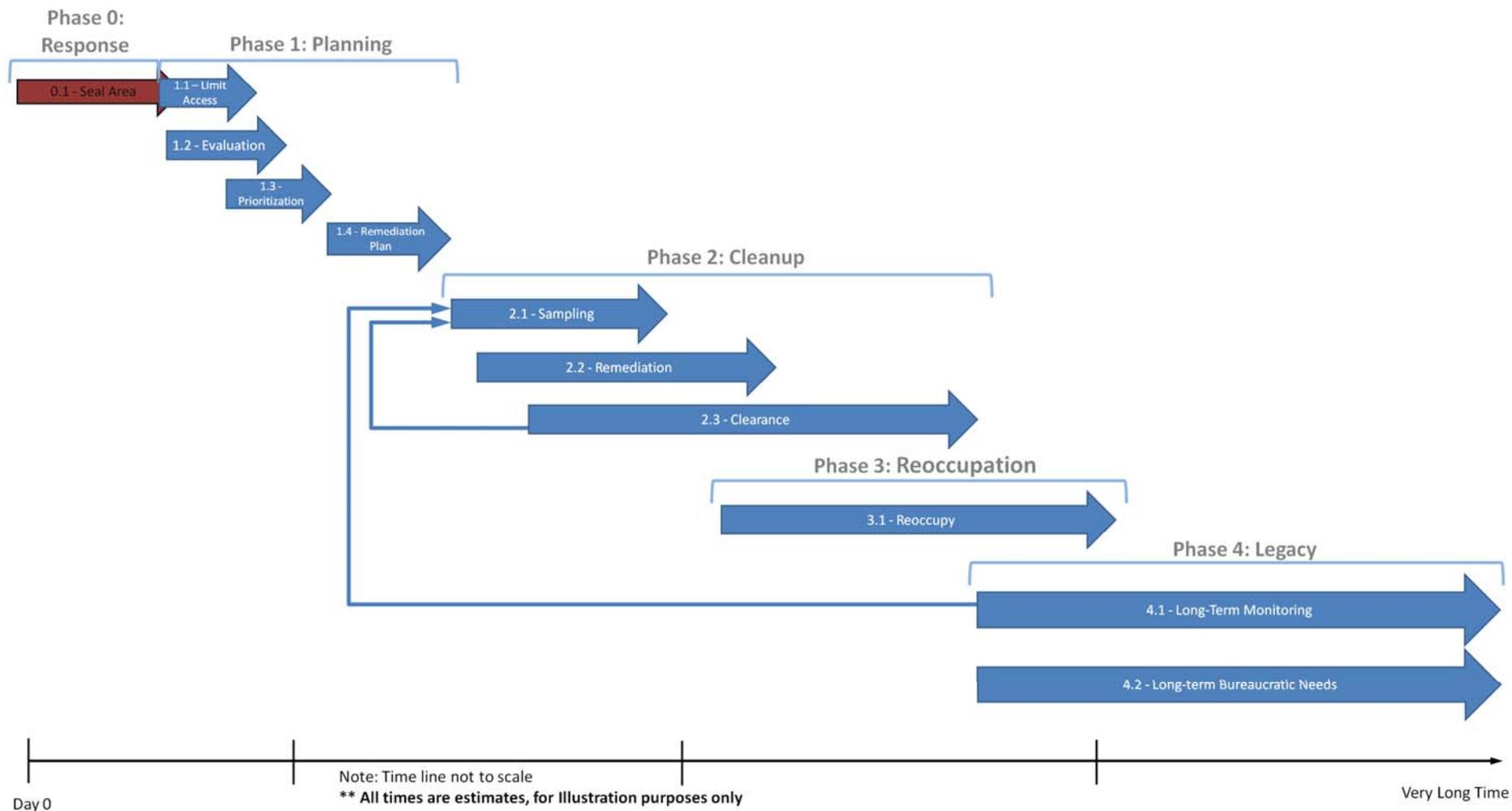


Figure 3 - Simple ConOps Timeline



2.2 - Scope

This Framework addresses the area of the Seattle UASI including JBLM. It identifies key functions and decisions that need to be addressed for long-term recovery that may last months or years after the initial attack. Currently no framework exists to address long-term recovery from a catastrophic wide-area anthrax attack. Appendix 1 (11.1 - Appendix 1 - Scenario Description) provides a description of the scenario on which this Framework was developed.

2.3 - Situation Overview

“Unless the world community acts decisively and with great urgency, it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013.”

This was the somber conclusion of the bipartisan, congressionally mandated Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism in its report, *World at Risk*, released in December 2008.⁵ On December 2, 2008, the Director of National Intelligence publicly agreed with this assessment. As these examples show, the threat of bioterrorism is real:

- In December 2008, the Commission concluded that terrorists are more likely to be able to obtain and use a biological weapon than a nuclear weapon.
 - This finding is not singular: In recent years, the U.S. has received strategic warnings of biological weapons use from dozens of government reports and expert panels.
 - One recent study from the intelligence community cited by the same commission projected that a 1- to 2-kilogram release of anthrax spores from a crop duster plane could kill more Americans than died in World War II (over 400,000 killed). Cleanup and other economic costs could exceed \$1.8 trillion.⁶
- A biological incident such as a wide-area anthrax contamination attack would be catastrophic, inflicting a significant number of casualties and potentially introducing devastating economic impacts.

⁵ Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism. *World at Risk*. December 2008. <http://www.preventwmd.gov/>.

⁶ Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism. *The Clock is Ticking: A Progress Report on America's Preparedness to Prevent Weapons of Mass Destruction Proliferation and Terrorism*. October 21, 2009, pg 3. <http://www.preventwmd.gov/>.

- Such an incident would present an unprecedented challenge for the local, state, and federal agencies, military, private sector, and individuals on many fronts ranging from vaccination and treatment to prioritization of cleanup actions to waste disposal.
- Anthrax spores can survive in the environment for long periods of time and can be readily spread.
- A large-scale anthrax attack will challenge the long-term financial and economic future of the region, in part because Washington’s economy is the most trade dependent in the U.S.⁷
- Such an incident would likely depress the national economy given that the ports of Seattle and Tacoma are the third largest in the Western United States and handle 7% of all U.S. exports and 6% of all U.S. imports, representing \$100 billion in annual trade.
 - Three-quarters of the international container cargo arriving at Puget Sound ports service the central and eastern regions of the United States.
 - Annually 70% of the goods shipped to the State of Alaska pass through the Port of Tacoma.
- With widespread contamination, operations at key regional businesses⁸ (non-critical infrastructure) may need to shut down for decontamination and cleanup, and some facilities may experience total loss.
 - Building owners have indicated that their limit for absorbing losses is only 6 months, meaning that, if they are not earning rent after 6 months and are facing large decontamination costs, they are likely to abandon their facilities.

2.4 - Planning Assumptions

This Framework is built on the following assumptions:

- The recovery effort hinges on the ability of the federal government to
 - Commit to fully funding recovery, perhaps through a unique funding mechanism
 - Rapidly develop the national industrial base needed to design and build equipment for cleaning the area and to produce Personal Protective Equipment (PPE)

⁷ Washington Council on International Trade. Home Page. Accessed July 7, 2010. <http://www.wcit.org/>.

⁸ This Framework considers “locally identified critical infrastructure” rather than the DHS “critical infrastructure and key resources (CIKR).” Locally identified critical infrastructure includes many overlaps with the CIKR but also expands the definition to key regional businesses and other enabling assets for the healthy functioning of the region.

- Increase laboratory capacity
 - Hire and deploy remediation teams
 - Develop a training program for remediation teams
 - In concert with the region, establish and defend standards for cleanup
 - Develop a nationwide epidemiological and health monitoring program
 - Provide national incentives that support and increase economic activity between the areas impacted and the rest of the nation.
- The federal government will not consider the loss of a major U.S. city an acceptable outcome and will provide extensive resources in both the emergency response and recovery phases.
 - The President of the United States will declare a disaster in the region and enact the Stafford Act and FEMA will establish a Joint Field Office (JFO).
 - Washington State will likely not have sufficient housing to accommodate the number of displaced people, remediation workers, and personnel managing the recovery operations.
 - The recovery effort will take much longer unless needed resources and capabilities are rapidly developed and delivered to the affected areas. Recovery efforts should be implemented as quickly as possible to minimize recovery time.
 - The recovery timeline will not be shortened without an unprecedented speed of operations and surge of capabilities by government.
 - The anthrax release will cause fatalities on a massive scale.
 - The DOD, like all entities in the affected area, will be impacted. Limited military operations will continue.
 - Critical infrastructure may remain operable but could be contaminated. Existing communication infrastructure is sufficient for the recovery. However, in both cases, infrastructure maintenance personnel may need to be replaced because of illness, death, or relocation. Facilities can be used by properly medicated workers in appropriate PPE.
 - Resuming and maintaining both locally identified critical infrastructure and CIKR operations will be a major priority for recovery operations.
 - Reorganization of the government may become necessary. Some areas may lose significant portions of their populations, and others may grow. Planning for this eventuality should be undertaken at the beginning of recovery.
 - The media will repeatedly describe in detail the almost insurmountable challenges facing the recovery effort, such as multiple years for remediation. Social media coverage will be extensive and become both a positive and negative force in shaping public opinion.

- Evacuations will be requested, and access will be controlled in the impacted areas.
- The influx of volunteers may require housing, food, medical care, and other necessities. The approximate size of the group is unknown.
- The lack of existing standards for the level of cleanup required for clearance will likely impede the recovery effort. Because the contamination may spread throughout the country, the U.S. Environmental Protection Agency (EPA) will be responsible for determining cleanup clearance.
- Long-term, multigenerational studies will be needed to fully characterize the impact to the people and environment affected by the attack.
- As with most wide-scale catastrophes, the regional economy will experience severe negative effects.
- As long as individuals must undergo immunization, prophylactic medication, or other measures to enter the contaminated areas, business and residential recovery will be severely impaired.
- Sufficient medication will be distributed worldwide and regionally to reduce fatalities. Information about anthrax prophylaxis options will be widely available.
- At some point in the recovery. The infection rate may spike because of people will stop taking needed medication.
- A wide range and high volume of material will require decontamination and disposal.
- A nationwide monitoring system for goods and donations will ensure that they are not contaminated either coming into or out of the impacted area.

3.0 - Concept of Operations

3.1 - Framework Activation and Goals

An anthrax attack is inherently different from natural disasters or attacks where conventional weapons are employed. The intentional release of anthrax spores will likely be conducted covertly to contaminate the greatest number of victims and cause the greatest amount of damage. Authorities will most likely not detect and confirm an attack until at least 2 to 3 days after the incident. Patients with flu-like symptoms most likely will not present at local emergency rooms and private physician offices until 36 hours after release.

The recovery plans based on this Framework will be implemented immediately on confirmation of an anthrax attack. First response plans will be put in motion, and, initially, response operations will have priority. However, the complexity of the recovery will require that recovery planning activities be started as soon as possible. Efforts will transition to the priorities of recovery once areas are secure enough to begin assessment and characterization.

The key goals of this Framework are to allow the development of recovery plans that:

- Protect life, property, and the environment to the greatest extent possible
- Prevent opposition forces from destroying the region
- Shorten recovery to a period of less than 5 years
- Recover the area to a new definition of normal.

3.2 - Doctrine and Strategy

The contaminated areas in the Seattle UASI will be cleaned and reoccupied. Federal authorities have indicated that recovering from a widespread attack will be a key priority, because the success of an attack to destroy a city or military installation is not acceptable.

The recovery effort will be completed as quickly as possible to minimize impacts and to send a message to the perpetrators. Given that there has not been a wide-area biological attack on U.S. territory, the length of recovery cannot be estimated with a high degree of certainty. It is essential that infrastructure and property be maintained during recovery.

Interdependencies require the strategy for recovery to be regional in scope. This Framework was developed by the Seattle UASI and JBLM to lay the foundation so that a regional and collaborative approach could be taken. Cleanup success depends on all jurisdictions recovering in a collaborative manner.

Recovery will require an effort from all levels of government driven from the local and county level through the state level for effective federal support. This Framework provides the

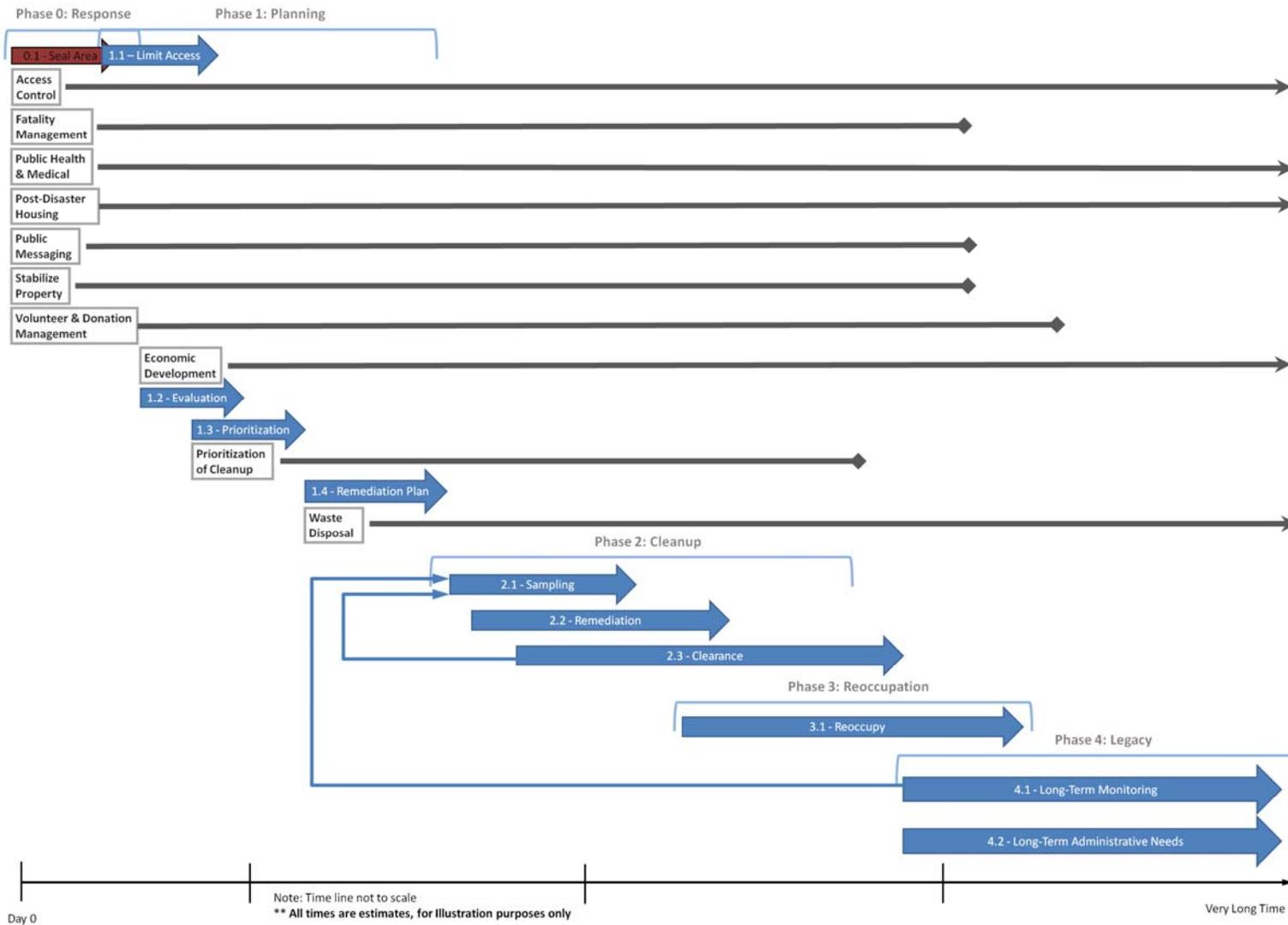
foundation for regional authorities to drive resource requirements and regional decision making in a matter that enables effective state and federal support.

The recovery process should, to the extent possible, be transparent, because public trust and confidence is central to any recovery involving contamination. Information that is sensitive, such as that regarding the criminal investigation and prosecution and the personal information about victims will be protected. However, all other information will be made readily available. Additionally, sufficient information about the bottlenecks in cleanup, such as debris management, should be provided to the general public and private sector to allow them to make plans to cleanup and reoccupy their properties when possible (see 3.4.10 - Waste Disposal).

3.3 - Phased Detailed Concept of Operations

For the purposes of this Framework, recovery is divided into four phases: “Planning,” “Cleanup,” “Reoccupation,” and “Legacy.” Further discussion of these phases follows Figure 4 on the next page (Figure 4 - Detailed ConOps Graphic). The figure shows the general approach to the recovery ConOps. The list is not complete; other functional needs will likely be encountered.

Figure 4 - Detailed ConOps Graphic



3.3.1 - Phase 1 - Planning and Assessment

3.3.1.1 - Access Control – Limited access will be allowed into the impacted area to prevent additional contamination, preserve the crime scene (if applicable), and limit crime in the contaminated zone.

- Timing – This phase will begin during emergency response but carry over into recovery. Until security is established, evaluation teams may not be able to enter the area. As zones are secured, evaluation teams can move in behind security forces.

3.3.1.2 - Evaluation – After the contaminated area has been secured, multi-disciplinary assessment teams will deploy into the area. The contaminated area will likely have been evacuated in haste, leaving utilities on, food on the shelves, and buildings unsecured. Also, any modern city requires daily maintenance to maintain infrastructure and property, and these issues need to be addressed.

Because of the widespread nature of the attack, this assessment may operate in a similar way to triage. An initial assessment identifies areas that need the most effort to clean up. Planners are able to focus limited sampling and characterization resources initially in areas that can be most effectively cleaned or are most important to the cleanup effort (Sampling is in Phase 2.)

- Timing – As zones are secured, and personal security is relatively assured, the evaluation teams may begin their work.

3.3.1.3 - Prioritization – Resources may not be sufficient to clean up every location at once, which means that policy makers will need to prioritize the buildings and areas needing cleanup first. This process is unlikely to be a simple or without controversy (see Section 3.4.5 - Prioritization of Cleanup).

- Timing – Will occur in parallel with evaluation and initial prioritization must be completed before the Remediation Planning efforts begin.

3.3.1.4 - Remediation Plan – A remediation plan may be necessary before remediation activities begin.

- Timing – Remediation planning relies heavily on prioritization and cannot begin until prioritization is complete.

3.3.2 - Phase 2 – Cleanup

3.3.2.1 - Sampling— Continuous sampling and monitoring may be required in the contaminated area to judge progress and support cleaning efforts. Furthermore, baseline sampling and characterization are necessary before remediation efforts can begin.

Equipment and resources to develop sampling and characterization strategies and plans may be limited; however, a framework and process should be put into place.

- Timing – Once a remediation plan is complete, sampling teams can begin focusing their limited resources on sampling and characterizing the first area identified by the plan.

3.3.2.2 - Remediation - Remediation efforts will occur in a coordinated manner according to the RAP and under the authority of local incident commands (see Section 3.5 - Direction and Control). Contracted remediation workers may arrive to perform this task, assuming appropriate protections, training, and plans are available, and sufficient funding is in place.

- Timing - Baseline sampling and characterization are necessary before remediation can begin. However, as areas and buildings are characterized according to the RAP, work can begin to clean up those buildings.

3.3.2.3 - Clearance – Once areas and buildings are cleaned, they may require extensive characterization before they are cleared for public use. This clearance will likely require, at a minimum, certification from a public health agency indicating the risk associated with entering the “cleaned” area.

- Timing – As remediation teams finish work on areas, clearance work can begin. It will be time consuming and demand extensive resources to clear areas.

3.3.3 - Phase 3 - Reoccupation

Once buildings and areas have been cleared for reoccupation, extensive efforts to encourage repopulation of the area may be necessary for recovery of those buildings and areas. Especially during the early phases of remediation, bringing people back to the affected areas may be challenging because of fear and a major lack of supporting businesses and infrastructure.

- Timing – Once buildings and areas start to be cleared, the government may need to begin efforts to induce residents to return to, or enter, the affected area once post-clearance sampling is complete.

3.3.4 - Phase 4 – Legacy

3.3.4.1 - Long-Term Monitoring – Once clearance of areas and buildings is completed, they will require long-term monitoring to confirm the absence of active anthrax spores. Additionally, workers and volunteers may require long-term monitoring.

- Timing – As buildings and areas are cleared, this effort will need to begin. It will last into the foreseeable future.

3.3.4.2 - Long-Term Administrative Needs – Long-term efforts will also be needed to handle the return and identification of property, bodies, and other items affected by the attack but not claimed in the immediate aftermath. Extensive recordkeeping and indexing capabilities will be needed throughout the recovery but especially in the long term.

3.4 - Detailed Functional Concept of Operations

Detailed descriptions of functional areas are included to address some of the key issues expected to impact recovery. Each functional area includes a description of the issue, identification of the relevant Recovery Support Function (see Section 4.0 - Assignment of Responsibilities), a description of key information from response that may impact recovery, and a discussion of planning considerations and key policy questions for each of the four phases. The areas include the following:

- Section 3.4.1 - Access Control
- Section 3.4.2 - Economic Development
- Section 3.4.3 - Fatality Management
- Section 3.4.4 - Post-Disaster Housing
- Section 3.4.5 - Prioritization of Cleanup
- Section 3.4.6 - Public Health and Medical Services
- Section 3.4.7 - Public Messaging
- Section 3.4.8 - Identify, Stabilize, and Maintain Infrastructure and Property
- Section 3.4.9 - Volunteer and Donation Management
- Section 3.4.10 - Waste Disposal

3.4.1 - Access Control

Access control is broadly defined as the restriction to specifically credentialed individuals of the ingress of individuals and their property to contaminated zones and individual structures, as well as requiring egress from the contaminated zone through decontamination points. With wide-scale contamination of facilities and property by a biological agent, public access to those facilities and property could lead to a significant spike in infection or a serious security threat from proliferated biological weapons. Access control will be required through all phases of an incident and needs to be established and continuously maintained as early as possible to save lives and facilitate recovery operations. In later phases, access control considerations associated may change slightly to reflect the circumstances.

Emergency Response Assumptions: The following actions taking during emergency response will impact access control during recovery:

- A credentialing system, based on zoning systems within the contaminated area, will be necessary.
- A perimeter may be difficult to establish because of the inherent difficulty of securing a large area. Additional resources may be required, whether from mutual aid agreements or from additional state and federal resources.
- Access control issues will likely have an impact on transportation through contaminated zones and will have a direct impact on usable emergency access routes.
- Cross-jurisdictional issues need to be addressed early on.
- Access control may not be in place quickly, potentially causing an expansion of the contaminated area.

Recovery

Phase 1: Planning

Scope: Restricting ingress of individuals and property into contaminated zones to credentialed individuals and requiring egress of individuals and property from contaminated zones through official decontamination points

Support Function: Law enforcement

Considerations: While many access control issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Maintaining perimeter control
- Establishing, enforcing, updating, and maintaining a common credentialing system to ensure effective emergency response and safety
- Establishing and maintaining controlled access points where decontamination will take place for individuals and property exiting the area, PPE standards can be enforced, and credentials can be checked
- Reviewing legal obligations in every jurisdiction
- Maintaining cooperation across jurisdictions, which will be vital to prevent secondary impacts from access control decisions made in other jurisdictions
- Involving jurisdictions outside of the immediately impacted area in planning because access control decisions in one jurisdiction can have serious repercussions for the rest of the region.

Policy-Related Issues:

- Can private security firms provide perimeter security?
- Will neighboring jurisdictions initiate access control points to avoid (or limit) receipt of refugees?
- What is the common credentialing system and how will it be enforced?
- Who has the authority to limit or control access to private property over an extended period, beyond initial emergency response justification?
- Is the seizure of property when the owner refuses, is absent, or is unable to maintain and/or clean the property covered by the Revised Code of Washington (RCW) Title 8 – Eminent Domain?
- What redress do property owners have for being denied use of their property by the government in cases where private property must be disposed of because its composition is not capable of being cleaned?
- What level of force is reasonable to stop unauthorized ingress to, or egress from, contaminated areas?
- Can parents who refuse to immunize their children on religious or moral grounds be barred from taking them into contaminated areas?
- To preserve the value of certain rare items, can artistic, religious, and other unique or valuable items that, because of their composition, cannot be cleaned be removed from the contaminated area without being cleaned provided they are sealed in a tamperproof container?
- What should be the penalty for entering a contaminated area without authorization? Under current law, doing so would be considered a misdemeanor with very little penalty, which would likely not be a sufficient deterrent.

- Religious doctrine may require that services continue to be held at certain places of worship in the contaminated area. Large numbers of followers entering the contaminated zone to attend services could interrupt or overwhelm operations at the controlled access points. Other examples include burials and traditional celebrations and apply to a great number of ethnic groups. Can such services be banned?
- Under what legal authority can private property be searched either during exit from the contaminated areas or during cleanup operations within the contaminated areas? During the long recovery phase, where exigent circumstances doctrine no longer applies, the authority of the government to search and seize private property must be clearly defined and authorized.
- If a mechanism for multi-jurisdictional cooperation does not exist, who has the authority to force it?
- Will the military support or take command of the incident over local law enforcement?

Phase 2: Cleanup

Scope: Continuing restricting ingress of individuals and property into contaminated zones to credentialed individuals and requiring egress of individuals and property from contaminated zones through official decontamination points

Support Function: Law enforcement

Considerations:

- Protocols must be established for moving large quantities of waste outside of the impacted incident perimeter, hours of transportation, security, and items accepted for movement.
- Mutual aid agreements for access control should be utilized to help with staffing and resource surges.

Policy-Related Issues:

- Surrounding jurisdictions may oppose the transport of waste contaminated with anthrax through their communities.

Phase 3: Reoccupation

Scope: Forces will be drawing down access control as the area is reoccupied. Scaled levels may prevent ingress and egress from the contaminated zones while allowing maximum use of cleared areas.

Support Function: Law enforcement

Considerations:

- What is the vaccination policy for medical concerns and what is acceptable risk? These issues will have a major impact on the way zones are reoccupied and impact access control during reoccupation.
- Access control needs to be scalable so that it can be limited appropriately as zones inside the original perimeter are cleared to allow a safe reoccupation.
- Multiple types of facilities and areas with different levels of access must be clearly delineated.
- What can be done to prevent passage through or entry into contaminated areas to avoid recontamination?

Policy-Related Issues:

- What decisions must be made associated with acceptable levels of risk for different usage areas. For example, should a school have a lower tolerance for risk than a parking garage? How will this be enforced?
- What is the strategy for access (phased access, controlled access, etc.) and how is it authorized legally?

Phase 4: Legacy

Scope: Limiting access control to a few areas that will have been deemed irreparably contaminated

Support Function: To be determined

Considerations:

- What can be done to limit passage through contaminated areas into cleaned areas?

Policy-Related Issues:

- Who provides security for buildings and areas that are not cleaned?
- What are standards for providing security? Who enforces those standards?

3.4.2 - Economic Development

Economic development in this context is broadly defined as the planning and actions to recover and ultimately improve the economic vitality of the region after a wide-scale biological incident.

Economic development will be necessary because the devastation caused by biological weapons terrorism is widespread and may have a severe impact on the regional, state, and national economies and potentially the world economy. Regional ports are responsible for approximately 7% of U.S. exports and 6% of U.S. imports representing \$100 billion in trade. A biological incident would severely undermine confidence in products that have passed near the affected area. Additionally, because of the delay in detecting a biological attack, many areas well outside of the directly affected area may experience high death rates that can be directly attributed to the biological agent, further undermining consumer confidence worldwide and developing a stigma about products moved through the region. Research indicates that a disaster causes approximately 25% of businesses to fail. Furthermore, private sector building owners have indicated that six months without rent or a good plan to return tenants to their property is their limit for absorbing losses. Those outside of the Northwest are expected to assume that all the products and people from the different jurisdictions near the affected area may be contaminated, pointing to the need for a consensus-driven approach to recovery and remediation. Unless all jurisdictions recover equally, the recovery of both the region and individual jurisdictions may fail. The role of government in the economy is not to sustain business; however, it does need to provide the infrastructure and security that allows business to develop, grow, and succeed in what was once a contaminated area.

Economic development efforts will occur throughout recovery with changes in policy to support the objectives of each phase. The economic development portion of the Framework may outlive the bulk of recovery efforts and continue to be implemented well after the “new normal” has been established.

Emergency Response Assumptions: The following actions taking during emergency response will impact economic development during recovery:

- The process of emergency response and recovery will be as open and transparent as possible to build and maintain confidence and trust in the government (see Section 3.4.7 - Public Messaging).
- A perimeter will be established and prevent the egress of products for sale that have been contaminated. The sale or distribution of contaminated goods from the region, regardless of whether the goods were intentionally distributed without warning of the dangers, will be very detrimental to the economic recovery (see Section 3.4.1 - Access

Control). The perimeter will also protect public and private property from looting, destruction, or other types of damage.

- Jurisdictions surrounding the immediately impacted area should encourage relocation of businesses from the impacted area into their jurisdiction and support policies to keep affected businesses near the impacted area.
- Information will continuously be provided to the private sector about plans for recovery and the intention of the government to work with the private sector throughout planning, cleanup, and reoccupation of the area.

Recovery

Phase 1: Planning

Scope: Planning for maintaining and improving the economic vitality of the region

Support Function: Regional Recovery Task Force Concept (RRTF)

Considerations: While many economic development issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Decisions made during this phase will have a major impact on the remediation time for the impacted area. The shorter the remediation time, the more effective and faster the economic recovery.
- Government agencies should work closely with the private sector during all phases, including providing information, getting feedback, and involving the private sector in decision processes. Where possible, agencies will establish a business resource center with a liaison to the RRTF.
- Locally identified critical economic infrastructure should be determined. Roads, telecommunications, schools, housing, healthcare, and other supporting infrastructure for employees' needs are all key enabling assets for businesses. Economic recovery should be a key factor when considering priorities for cleanup of critical infrastructure (see Section 3.4.5 - Prioritization of Cleanup). Also, these assets may need to be bolstered in nearby areas to support the relocation of people, government, and business.
- Efforts should be made to encourage DOD installations to achieve mission readiness to support economic sustainment and recovery in their surrounding areas. DOD installations employ a large number of on- and off-base personnel, which in turn support enabling businesses.

- A strategy should be developed that may include consulting with businesses that vacated the area, to determine what incentives would encourage reoccupation during Phase 3. It is important to plan for complementary businesses as well.
- Incentives should be provided to move businesses to backup locations in the region. Incentives should include support for expansion or maintenance of existing critical economic infrastructure in the alternate locations to handle additional usage.
- While efforts are undertaken outside of the affected area to provide support to affected businesses and employees, planning for cleanup must address the needs of both relocated businesses and new businesses and prioritize cleanup efforts.
- Planning for repurposing of land should begin immediately, or, if in process, should be accelerated, to support prioritization efforts and minimize recovery time.
- Reoccupation offers a distinct opportunity to repurpose and rezone areas to improve their resiliency to natural, accidental, and intentional disasters and to promote recovery objectives.
 - The State Growth Management Plan may limit the ability of local jurisdictions to repurpose areas for recovery. These limitations should be re-evaluated in light of this event.
 - Environmental assessments may be needed for any land-use and repurposing activities. Additionally, environmental concerns in Puget Sound could have a major impact on decisions for repurposing and land use.

Policy-Related Issues:

- What incentives will retain businesses in the region, including mitigation measures to move businesses to other parts of the region that are not within the impact area? In some cases, facilities may be set to be reoccupied in weeks or months. Incentives should be prepared immediately for these cases. In other cases, it may be years before reoccupation can occur, and preparation for new incentives to bring in new businesses during reoccupation will be important.
- Are there aspects of the State Growth Management Plan that should be modified to support recovery goals?
- How will land-use decisions be made? Who are the decision makers?
- How will repurposing decisions be made? Who are the decision makers?

Phase 2: Cleanup

Scope: Implementing and refining the plan to maintain and improve the economic vitality of the region

Support Function: RRTF

Considerations:

- Messaging and incentives may shift slightly according to the phase. Specific messages about incentives will need to be crafted.
- Agencies must work closely with the private sector to coordinate resources and cleanup efforts and provide information that they need to remain confident in the long-term viability of the regional economy.
- Information about cleanup resources should be provided to enable the private sector to retain and clean up their facilities. Sufficient information about the clearance process and permitting for reoccupation should be provided along with any incentives for business retention or reoccupancy.

Policy-Related Issues:

- Who is approved to inspect buildings? Extensive demolition and remodeling are anticipated as a part of decontamination, meaning that there is a need to surge building inspection to avoid long delays.
- What is the cleanup level?
 - How much risk is acceptable?
 - Will certain areas require less stringent cleanup?
 - Who approves these decisions?
- Who is approved to do health inspections for cleanup levels and general health concerns? (Because of an expected large number of requests, resources are probably insufficient to support this need through normal channels.)
- Who is certified to clean up private sites, and what criteria will be used to make those certifications?
- Should local jurisdictions approve preferential vendor-use policies and buy locally to spur economic growth? What policies and legislation are needed to do this?

Phase 3: Reoccupation

Scope: Implementing and refining the plan to maintain and improve the economic vitality of the region

Support Function: RRTF

Considerations:

- The RRTF and the business offices of companies hired to do the cleanup should relocate their offices into the recently cleaned areas. This relocation will have multiple positive impacts including ease of access to areas targeted for cleanup, confidence building for the public and economic incentives for building owners near the impacted area.
- Agencies should work closely with the private sector to address concerns and interests to support the reoccupation of the affected area. Private sector investment can also be used to prime the pump of the economy if incentives can be identified and risks mitigated for the investors.
- Key stakeholder concerns should be addressed. Stakeholders include large military bases, which may be the number one employment multiplier in a jurisdiction. [For more information, see the report from the Pacific Northwest National Laboratory (PNNL), *Economic Impacts of a Wide Area Release of Anthrax* available at <http://nwrtpc.pnl.gov>.]
- New employees may be trained to be contractors for recovery during this phase. Areas could look at retraining and education programs to help build a new workforce.
- Incentives need to be refocused to encourage businesses and employees to return to the area.
- Incentives need to bring in supporting businesses to encourage the public as well as new business growth and development.
- Policy incentives need to be refocused on also supporting the return of the population into the area. Business is a first priority, however, because they will bring in people to work and support the return of the population into the area.
- A spike in infections is highly likely because of noncompliance of taking medication; this spike could severely undermine economic confidence and impact people living in the region as they reconsider the benefit of living in the remediated area, and worldwide.

Policy-Related Issues:

- Will government provide a safety net if someone tries to reestablish in the area after it is cleaned and the business fails? Will incentives be provided to allow relief for unexpected needs as business is slow at first? If so, what are the guidelines for making this judgment?

- How does the government dispose of property acquired during cleanup? Will it be destroyed, auctioned, donated, or disposed of in some other way?

Phase 4: Legacy

Scope: Beginning to phase out incentives and shifting activities toward more normal economic development as key objectives are accomplished

Support Function: RRTF

Considerations:

- Messaging (see Section 3.4.7 - Public Messaging) and incentives may change to meet the needs of this phase.
- Public support at both the state and federal level will likely wane for continued economic and policy incentives for the region as the situation establishes a “new normal.” This change may impact the ability of government to provide financial incentives to business.
- Incentives to promote tourism, trade, and hosting of business and government meetings may help promote an image of a healthy, functioning area and bring needed outside money into the region.
- There will be a continuing perception that all agricultural products from the state are contaminated. Therefore marketing them may be difficult.
- Political disputes regarding the attack may have a negative impact on recovery. For example, disputes over how to memorialize the attack may impact the image of a healthy, functioning area.

Policy-Related Issues:

- Will there be a policy to incentivize people to return to the area who left?
- What is the “statute of limitations” for a person to return and claim property?
- If government subsidies and bailouts are provided, how long will they last for failing businesses? What are the guidelines?

3.4.3 - Fatality Management

Fatality management encompasses activities associated with investigation of the incident, and identification, transport and storage, notification, and processing/disposition [burial and cremation] of the bodies, with appropriate communication occurring throughout the process addressing issues such as public health, mental health, family assistance, and palliative care. Any large-scale incident where a large number of the population has perished and overwhelmed local capabilities will result in challenges. Fatality management starts during the emergency response phase and remains in action well after other recovery activities are underway.

While the fatality management process works well in the case of a single death, when high fatality rates occur the processes and procedures may require amendment. For example, when funeral home services are overwhelmed with a large number of victims, hospitals may be needed to provide temporary refrigerated storage. Morgue capacity in most hospitals may not be adequate for this task. Several solutions including refrigerated trailers or buildings, free-span structures, or temporary centralized morgue facilities may need to be considered early in the emergency response phase.

Emergency Response Assumptions: The following actions taken during emergency response will impact fatality management during recovery:

- Regionally, plans and staffing (medical examiners/coroners) will be insufficient to handle the number of fatalities associated with a wide-scale biological incident.
- Early in emergency response, agencies will discuss DOD's role and Disaster Mortuary Operational Response Team (DMORT) capacity and support with federal partners. DMORT is the only response organization prepared to handle large numbers of fatalities.
- The region may experience a gap in its emergency response capability. Hazardous materials teams have experience operating in contaminated environments but are unfamiliar with medical examiner procedures for processing remains and vice versa. International support may prove necessary.

Recovery

Phase 1: Planning

Scope: Conducting parallel efforts to deal with both a large number of corpses and to support public communication for mental health purposes.

Support Function: Local agencies responsible for coroners and medical examiners⁹ will lead this effort with the Federal Bureau of Investigation (FBI) likely engaged, along with local law enforcement, in making many command decisions as the area will be a crime scene. In small jurisdictions, fatality management may fall to the State Department of Health.

Considerations: While many fatality management issues will begin to be addressed in immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Capacity issues will be impacted by a decision about whether each body will be investigated (autopsied/confirmatory testing for anthrax) and how deaths will be legally certified.
- Agencies will need to identify a means to rapidly identify and collect bodies.
- Agencies will need to determine a solution for storage and processing and final disposition of bodies because cremation services may be overloaded.
- National Guard assets and DMORT may be available for preparing/identifying bodies and performing autopsies. International support may prove necessary.
- Continuity of operations may be a problem for the medical examiners/coroners offices, which may also have sustained casualties and lost access to facilities.
- DMORT has historically been less able to work with more than one jurisdiction.
- The Washington State Department of Health may have a supporting role in a mass fatality response of this scale.
- Engagement of the U.S. State Department for help in deaths of foreigners will be necessary.
- Strong family assistance support will be needed.
- Messages to volunteers, families, and others involved may change.
 - Information to tell families that they may never get their loved-one's body back, and at best, won't get the body for a very long time. An educational resource should be provided to inform families of what they should expect from the fatality management process.
 - Targeted messages about grief, loss, and community dislocation
 - Communication with healthcare providers at all levels.
- Coordination with DOD for disposition of military personnel will be very important.

⁹ This is jurisdiction dependent because the coroner's and medical examiner's offices are under different authorities and agencies in different jurisdictions. It may be the local department of health or another agency.

- Agencies need to determine appropriate levels of PPE for workers based on guidance from EPA and a decision by the RRTF.
- Timelines associated with different cultures and religions for disposition of corpses should be considered. These preferences may be impacted by policy decisions about priorities (see “Policy-Related Issues” below).
- Agencies need to identify whether life insurance will require thorough autopsies or even cover deaths associated with this incident.
- Agencies need to recognize that some people may wish to bury their loved ones, or spread their ashes, in a traditional area that is contaminated. Agencies need to work out protocols to either support or deny those desires.
- Agencies need to identify a protocol for deaths of workers on the job. Will they receive higher priority because of liability concerns associated with worker safety and health?

Policy-Related Issues:

- Will each body’s cause of death be investigated and death certified?
- Are there some laws that could/should be waived for certification of death and issuance of death certificates?
- In a situation like this, does the medical examiner/coroner retain jurisdiction over deaths for identification and certification of bodies?
- Where do bodies get sent for overflow capacity? Who decides that the area is no longer a crime scene and when?
- Who is responsible for decisions about when to stop doing autopsies for each body during waves of anthrax deaths? Is this addressed with the Washington State Attorney General’s Office?
- Major religious and cultural sensitivities are associated with death and disposition of corpses. What is the higher priority – thoroughly investigating deaths, maintaining strong public health protocols to prevent the outbreak of disease associated with improper storage of corpses, or following religious and cultural sensitivities?
- How will liability for workers be addressed if a worker dies from anthrax exposure during emergency response and recovery activities?
- Will people be allowed to bury or spread the ashes of their loved ones in the contaminated zone if it holds special significance to them?

Phase 2: Cleanup Phase and Implementing the Plan

Scope: Continuing parallel efforts to both deal with a large number of corpses and to support public communication for mental health purposes, with a greater focus on communication because most bodies will be processed. However, there may be continual response needs for spikes in any anthrax-related deaths. Determining anthrax-related deaths versus deaths from other causes may also be challenging.

Support Function: Local agencies responsible for coroners and medical examiners may lead this effort. The FBI and local law enforcement may be engaged at this point in making many command decisions as it could still be considered a crime scene. In small jurisdictions, cleanup may fall to the State Department of Health.

Considerations:

- Long-term mental health issues can occur months to years after the end of the incident and can be exacerbated by social dislocation. Critical incident stress may increase and result in Post Traumatic Stress Disorders appearing in the population for those who have elected to stay in the region. Communication should focus on such issues as:
 - Stages of loss/grief – Anger, denial, bargaining, and acceptance
 - How to recognize critical incident stress signs
 - Continuing medical treatment as needed to avoid more death.

Policy-Related Issues: If not already addressed, the same policy issues from Phase 1: Planning will need to be addressed in Phase 2: Cleanup.

Phase 3: Reoccupation

Scope: Maintaining a strong emphasis on communication while the region's fatality management processes return to mostly normal, day-to-day operations with occasional response activities caused by spikes in deaths

Support Function: Local agencies responsible for coroners and medical examiners with limited support from law enforcement.

Considerations:

- People may continue to die from anthrax.
- Communication focusing on long-term mental health will be needed.

Policy-Related Issues: If not already addressed in Phase 1 or Phase 2, the same policy issues will need to be addressed. Specifically, will people be allowed to move the bodies of their loved ones to a burial site that is in the cleaned, reoccupied area? What will be the key factors in making that decision?

Phase 4: Legacy

Scope: Conducting normal operations

Support Function: Local agencies responsible for coroners and medical examiners

Considerations:

- New procedures may need to be adopted to check for anthrax when investigating cause of death and medical complications associated with anthrax exposure.
- Many research projects may be associated with the lessons learned from mass fatality management.

Policy-Related Issues:

- How much information about autopsies, procedures, and other associated actions will be released to the public about activities that took place in the first three phases?

3.4.4 - Post-Disaster Housing

Post-disaster housing is broadly defined as the activities taken to provide and support housing of people after a catastrophic incident. The nature of the support may depend on whether insurance will cover losses caused by the incident. Post-disaster housing needs will be significant for both the interim and the long term for a diverse population base following a catastrophic disaster. The range of people in need of support may include the homeless and destitute, displaced residents, remediation workers, and volunteers. Historically, interim housing is defined as a 6- to 8-week period. However, following a catastrophic incident like a widespread anthrax attack, the timeframe for interim housing may need to be extended. Throughout the recovery, response-like activities may be needed, including sheltering and finding interim and long-term housing as conditions change.

Emergency Response Assumptions: The following actions taken during emergency response will impact post-disaster housing during recovery:

- Limited state or local resources may be devoted to post-disaster housing; FEMA and HUD Programs may be limited as well. It is unknown what other federal resources are available (for example, DOD assets).
- Currently, unless specifically addressed, most insurance companies will not cover the damages from an anthrax incident.
- A significant population may remain in the contaminated area, unable to self-evacuate because of poverty, language barriers, and limited access to transportation resources.
- The federal government should look for rentable space within 50 miles of the edge of the hot zone of the anthrax incident.
- If hotels are an option, they will likely be occupied and needed for a minimum of 1 to 3 years.
- Housing will be needed for emergency workers and volunteers.
- All potential housing solutions should be considered, including (but not limited to) the use of cruise ships, shipping containers outfitted as apartments, college dorms, and trailers.
- Multiple jurisdictions may compete for limited housing resources to support post-disaster housing. Many may attempt to fill that need in their own jurisdictions, outside of impacted areas, but the shortfall of resources will likely be severe.

Recovery

Phase 1: Planning

Scope: Developing strategies for housing displaced residents (government support/other considerations)

Support Function: At the federal level, FEMA and HUD; at the state level, the State Department of Commerce; and at the local level, human services

Considerations: While many post-disaster housing issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Emergency shelter is only a viable solution for a short period of time – up to 30 days.
- Because of the long-term nature of the incident, efforts should be made to ensure that housing solutions are of a permanent nature. Cleanup and restoration could take more than 5 years, and traditional, interim, or short-term solutions will likely be insufficient.
- Supply chain logistics need to be accounted for at all housing sites, including privately owned and contracted facilities like hotels and apartment complexes. Food and water supply, laundry services, and waste disposal are only some of the many considerations that should be addressed.
- Schools, stores, day cares, banks, and other entities to may need to be established to re-stabilize homes.
- Potential relocation sites should be identified, taking into consideration available resources like finances or costs, priorities, and square footage. Housing availability may be limited in the geographic area of the attack, because a large number of residents may be displaced.
- The sources of funding and the duration of their availability should be identified. For example, if the Stafford Act is invoked, funding in the individual and households program may be used toward housing or a hotel.
- The location of interim housing needs to be surrounded by businesses to employ many of the displaced. Providing jobs should be a key priority during planning and relocation decision making.
- The eventual demobilization of post-disaster housing and emergency shelters should be considered in planning.
- A strategy for reoccupation of the affected area during Phase 3 needs to take into consideration policy decisions regarding priorities and funding. This strategy

should also account for longer-term considerations like resolving reoccupation concerns for formerly displaced residents (ownership disputes, etc). This activity should be well communicated to the affected population to help with implementation.

- Agencies must partner with the private sector to support recovery and housing.
- Coordination between jurisdictions could help prevent competition. Mutual aid agreements could be useful means to assist with this effort.

Policy-Related Issues:

- Resources may be insufficient to care for everyone in the disaster area, so which priority populations should receive post-disaster housing? What priorities should be considered during planning for relocation and reoccupation? For example,
 - Discourage permanent relocation out of the area
 - Retain as many people and businesses locally
 - Consider the difficulties of returning residents to their homes during Phase 3.
- Will requirements for accessibility that apply to emergency shelters continue to be enforced for post-disaster housing? For example, will Americans with Disability Act accessibility requirements continue to be a priority concern for planners?
- What types of incentives should be provided to encourage private sector participation in post-disaster housing efforts?
- What are the rules for site acceptance, and what is the authority for inspections? Does the work follow normal standards and codes or adjust them because of resource constraints?

Phase 2: Cleanup

Scope: Relocating people at the beginning of this phase

Support Function: At the federal level, FEMA and HUD; at the state level, the State Department of Commerce; and at the local level, human services

Considerations:

- Competition for a limited supply of housing may be ongoing between community workers and emergency workers.
- Implementation of housing and relocation policies may be impacted by the duration of funding for post-disaster housing; the duration is currently unclear.

- People may be relocated during this phase based on relocation plans developed in Phase 1. Continuing to prioritize multi-dwelling sites and interim or long-term solutions is important.

Policy-Related Issues:

- Will some sort of protection plan be put in place for displaced residents to suspend payment on their mortgages in the impacted area?
- What about new mortgages in areas of reoccupancy? Will there be a mechanism to protect consumers from risky lenders?
- Will rent be controlled in areas that receive displaced residents to prevent indirect economic damage, such as inflation, price gouging, or predatory lending?
- Will housing be inspected (for building and safety codes) before occupancy or will the inspection requirement be waived or altered? The funding stream dictates whether inspections are necessary for building codes.
- What are the requirements for anthrax clearance inspections before a facility can be used for shelter?

Phase 3: Reoccupation

Scope: Scaling down post-disaster housing. The government is demobilizing temporary federal housing or repurposing it to other uses and areas.

Support Function: At the federal level, FEMA and HUD; at the state level, the State Department of Commerce; and at the local level, human services

Considerations:

- A number of considerations may be associated with demobilized interim housing. Apartment buildings, hotels, cruise ships, containers, and other housing may be damaged from normal wear and tear. Waste from rebuilding or repairing these facilities may be extensive.
- People may want to stay in their post-disaster housing because of the length of their stay, and incentives may be needed to move them.
- Certain parts of the population may either be rendered homeless by the incident or may remain homeless. Once post-disaster housing operation ends or funding is cut off, they may no longer have access to housing.

Policy-Related Issues: Policy-related issues that will need to be addressed in this phase include the following:

- How long with support be sustained? What happens to people who do not have the ability or resources to provide for their own housing when support is ended?
- Will people displaced by the incident be prioritized or given incentives to return to the area?
- How will damages to these existing resources be repaired, and who will pay?
- Will resources be made available to people who want to relocate into the area? Does assistance exist?
- What incentives or deterrent can be used to encourage people to leave temporary (no matter how long their stay) housing when they do not want to leave? In some cases, even the least attractive post-disaster housing may be an improvement for some people, thereby reducing their incentive to leave.

Phase 4: Legacy

Scope: Limiting post-disaster housing to handling long-term administrative functions associated with the large-scale effort to provide solutions

Support Function: At the federal level, FEMA and HUD; at the state level, the State Department of Commerce; and at the local level, human services

Considerations:

- Legal claims will mount for issues such as payment for damages sustained to structures that were used for interim housing.
- Final disposition of remaining resources may continue to be an issue.
- Property values may have changed significantly from their pre-disaster levels.

Policy-Related Issues:

- How will resources be disposed of? What happens to trailer cities, shipping containers, tents, etc.?
- Is there a limit to the length of time people can claim issues with their homes or relocation homes from the incident?
- Are there disclosure issues for resale of facilities and areas that were contaminated and cleaned, up to 20 years later?
- What are the inspection changes/requirements?
- What local statements will support new buyers and help sellers who may be interested in leaving for non-attack reasons (job, family, etc.) years later?
- Will government subsidize property to limit the impact of severely declined property values on recovery?

3.4.5 - Prioritization of Cleanup

Prioritization of cleanup is broadly defined as the decisions and actions associated with identifying the key priorities for remediation of the affected area. Prioritization policy decisions may be impacted by scientific constraints and need to be supported by subject matter experts.

A large-scale incident may require prioritization of cleanup sites because of the limited resources to support remediation. Prioritization should provide guidelines to emergency management to develop a framework to remediate the impacted area.

Most activities associated with prioritization of cleanup falls under Phase 1 - Planning and should occur during sub-phase 1.3 - Prioritization. Prioritization is a necessary step before remediation can start and depends on initial assessments and information gathered during sub-phase 1.2 - Evaluation. Prioritization decisions will likely be subject to extreme political and media scrutiny because of the high impact it should have on the viability of the region. This effort can be supported by decision support tools like Prioritization Analysis Toolset for All-Hazards/Analyzer for Wide Area Restoration Effectiveness (PATH/AWARE).

Emergency Response Assumptions: Prioritization does not depend on response actions but on actions taken during sub-phase 1.2 - Evaluation. These assumptions about that sub-phase will impact prioritization during recovery:

- Information will be gathered from atmospheric and environmental testing equipment that can help characterize the transport of the anthrax spores and the affected area.
- Control, Assessment, and Preservation (CAP) Concept Teams should be formed and deployed into areas to support stabilization and initial assessment of properties for contamination and operational capability (see Section 3.4.8 - Identify, Stabilize, and Maintain Infrastructure and Property).

Recovery

Phase 1: Planning

Scope: Determining the order in which remediation teams take action

Support Function: RRTF

Considerations: While many prioritization issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Prioritization should be scalable to take into account the increasing availability over time of resources for cleaning facilities. Initially, after the attack, few resources would be available; however, within months to a few years, significant resources may become available to assist with cleanup.
- Prioritization decisions should be made in the context of the identified cleanup approach and contribute strategically to maximizing the effectiveness of the cleanup.
 - Cleanup may be conducted in zones from the edge of the contaminated area inward. It is not practical to clean an area that is surrounded by contamination as this is likely to cause recontamination or force building occupants to undergo decontamination every time they enter the facility.
 - Sealing a facility may be a viable alternative when cleaning would be cost prohibitive or so time consuming that it would delay the cleanup of surrounding facilities. However, it is unclear how cost effective sealing the building will be and what approach will work best.
- The prioritization scheme will be impacted by the available technologies and approaches that have been developed for remediation at the time of the incident.
- Different priorities may impact recovery time and can either shorten or lengthen remediation and recovery. The PATH/AWARE toolset can be useful in varying schemes. These priorities should be communicated to the public (see Section 3.4.7 - Public Messaging).
- Prioritization decisions need to consider economic, infrastructure, and community because these decisions may impact business viability and recovery time [see Section 3.4.2 - Economic Development for additional information, and the PNNL report, *Economic Impacts of a Wide Area Release of Anthrax* available at <http://nwrtpc.pnl.gov>].
- Public health concerns such as needs associated with medical care facilities should be considered to maximize available medical resources in the area. Public health concerns should also be considered to addresses questions about the level of risk and cleanup costs for facilities, which may impact overall remediation time.
- Key pieces of infrastructure and the economy depend on each other. Prioritization decisions must consider enabling assets for both cleanup and operation of high-priority facilities and areas. Some of these enabling assets may be less obvious and can be identified using the PATH/AWARE toolset.
- Of critical concern will be the availability of and access to resources. Cleanup of a building that is a health and safety risk or heavily contaminated may need to be

lowered in priority until resources are available. Resource limitations may also impact cleanup time. These considerations can be identified using the PATH/AWARE toolset.

- The interface with local, state, and federal plans and needs may have a serious impact on prioritization. Federal or state government agencies may want to set priorities for work supported by their resources, and these priorities may compete with local priorities. It is important to get local consensus on priorities while accounting for state and federal needs.
- Critical infrastructure and its key dependencies will remain a top priority.

Policy-Related Issues:

- Who sets cleanup priorities? Most likely this will be a combination of representatives for all the major interests, but this member list may prove unfeasibly long.
- What are the prioritization decision criteria and their weightings?
- Is sealing a low-priority building an acceptable temporary solution? Technical guidance is currently unclear.

Phase 2: Cleanup

Scope: Determining the order in which remediation teams take action.

Support Function: RRTF

Considerations:

- Media and political pressure about prioritization decisions may increase.
- Re-prioritization should be ongoing as new capabilities are stood up, technologies improve, lessons are learned, and information is gathered. In some cases, cleanup decisions may be impacted by who owns the building.

Policy-Related Issues:

- How will the prioritization framework be changed?

Phase 3: Reoccupation

Scope: Determining the order in which remediation teams take action.

Support Function: RRTF

Considerations:

- As businesses and residents return to their facilities, they may identify other, still contaminated facilities on which they depend, thus prompting re-prioritization. A robust discussion among policy makers in the RRTF and business owners, building owners, and residents may be useful in identifying key needs to support economic recovery. This discussion may be held in a community action group.
- Prioritization should be responsive to changes in government leadership, structure, and priorities.
- The prioritization strategy should be constantly re-evaluated.

Policy-Related Issues:

- How will dependencies identified by the private sector and residents be re-prioritized to support economic recovery?

Phase 4: Legacy

Scope: Determining lessons learned and publishing reports

Support Function: RRTF

Considerations:

- A great deal of information will have been learned from this effort and should be documented and shared with others.
- Prioritization decisions will likely be associated with lawsuits.

Policy-Related Issues:

- How much information about the prioritization decisions will be made public?

3.4.6 - Public Health and Medical Services

Public health and medical services is broadly defined as the activities associated with life-saving, safety, and health related to the incident and are focused on several key activities during the outbreak of the disease, including the following:

1. Public health communication
2. Disease surveillance and environmental monitoring
3. Environmental health
4. Identification and protection the population(s) at risk
5. Mental health support
6. Determination of the source of the disease
7. Assessment of the extent of residual biological contamination and response, restoration, and recovery actions as necessary
8. Acting as the conduit to the state lab for testing of samples
9. Broad dissemination of medicine and medical resources
10. Support of health care organizations with their surge capacities.

Public communication is a major component of public health and medical services. Public health authorities communicate information from the U.S. Centers for Disease Control and Prevention (CDC) to health care providers (for more information, see Section 3.4.7 - Public Messaging).

In a wide-scale anthrax attack, public health and medical services will obviously be needed. The attack may be declared a public health emergency, giving authority to public health to make decisions and take action. These decisions and actions should be coordinated with efforts under other functional areas and operate within the framework of cooperation (see Section 3.5 - Direction and Control).

Public health and medical services should be active through all phases of recovery, although the scope and emphases may change according to the characteristics of each phase.

Emergency Response Assumptions: The following actions taken during emergency response will impact public health and medical services during recovery:

- Because of the widespread impacts of the incident, managing resources such as medical supplies, pharmacies and clinics, and medication inventories may be a challenge.
- The civilian and military health care system may be completely overwhelmed. Alternative sites away from the contaminated zone will be used as much as possible for treatment of the non-infected.

- The epidemiological surveillance mission of public health will be critical in determining whether contamination has occurred and its extent. Identification of the affected population cannot be completed until area contamination has been characterized and verified using various remote and on-the-ground sampling techniques.
- Contamination may spread throughout the surrounding area, region, country, and probably world. Health and medical services at all levels will work together, as no single entity possesses the authority, expertise, and resources to act unilaterally on the many complex issues that may arise in the response to this non-routine disease outbreak and the multijurisdictional nature of the problem.
- Significant numbers of people with special medical needs will require shelter and food, most likely for months.
- The morbidity and mortality rates associated with the incident are variable but may be significant.
- The federal government will pay for continued regional prophylaxis needs.
- Bed space and qualified people to perform public health functions will be severely limited, particularly in the directly impacted area. Work will be underway to cross-train professionals to support public health and medical services during recovery.
- Efforts to acquire volunteer medical staff will also be underway (see Section 3.4.9 - Volunteer and Donation Management).
- New “standards of care” will be developed to account for the increased risk to first responders posed by exposure to anthrax and to mitigate the risks posed to exposed patients.
- People may leave the immediately impacted area and enter other health jurisdictions to request medical assistance and aid as well as for normal healthcare and treatment.
- All neighboring health care centers will most likely be overwhelmed.
- Public health will begin work on long-term environmental monitoring and tracking of fatalities caused by anthrax.
- Palliative care facilities may be necessary on a large scale for individuals who are mortally infected.
- Most active duty personnel will have been vaccinated for anthrax.
- Medical care facilities will likely have logistical challenges with distributing antibiotics.
- Military facilities will follow CDC and U.S. Army Medical Command guidance for short- and long-term treatment.

Recovery

Phase 1: Planning

Scope: Focusing on longer-term impacts of both contamination and treatment of anthrax, as well as maintaining the focus on public health communication. Occasional spikes in the death rate may require a temporary return to response activities. Parallel efforts in surveillance, monitoring, patient tracking, environmental health, information coordination, and logistical support will all be underway. Scientific research will also be conducted to better understand the health and associated sociological impacts related to the release of anthrax over a wide area.

Support Function: Local public health, in cooperation with other local health departments, the Washington State Department of Health, EPA, and CDC. Cross-jurisdictional coordination should be underway.

Considerations: While many public health and medical services issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Public health along with federal agencies will need to prepare for both short-term and long-term surveillance and monitoring and patient tracking to assess the effectiveness of current vaccines and medications, reactions to the vaccines, efficacy of any new treatments developed during the response, and migration of the disease.
- Public health should look at the long-term implications of anthrax in the air, water, and food, especially in areas where high anthrax contamination prevents or significantly delays cleanup.
- Vector monitoring will be very important in this phase and may include a wide variety of agencies and responsibilities. Some key vectors will likely include animals and weather because they can transport anthrax spores.
- Support for the capacity and solvency of the overall medical system in the region may be needed. Hospitals, medical clinics, private medical providers, long-term care, nursing homes, group homes, correctional institutions, dental clinics, pharmacies, mental health, emergency medical services, alternate care facilities (which may help with replacement of hospital capacity), and healthcare workers may be impacted. Areas surrounding the impacted area may need augmented medical capacity, including supplies, personnel, and facilities.
- Public health may require a great deal of technical advice to achieve its mission.

- Although initially high, the compliance rate for being vaccinated and taking medications may begin to drop, resulting in a temporary increase in fatalities and serious illness. This problem may be a characteristic of all phases.
- Drugs and vaccines will most likely be available at this point; however, the logistics of delivering them where they are needed may continue to be an issue.
- Prioritization of cleanup should consider medical and public health infrastructure and a representative from both should be involved in prioritization decisions (see Section 3.4.5 - Prioritization of Cleanup).
- A lab for sample analysis other than the Washington State Public Health Laboratory should be identified, and appropriate arrangements made for payment and analysis to expedite processes.
- Public health and medical providers may need access to the common credentialing system (see Section 3.4.1 - Access Control).
- Protocols for transporting patients contaminated with anthrax outside of the impact area and even outside of the region need to be developed, accounting for movement across, and into, many jurisdictions.
- Mental health planning will be important because the long-term impacts of the incident may include a significant increase in mental health disorders.

Policy-Related Issues:

- How will medical care for the uninsured and underinsured be reimbursed for private medical companies, including providers, pharmacies, personnel, and other portions of the healthcare industry? Current funding for recovery does not address this need.
- How will private insurers be reimbursed? Will it be different for public insurers (Medicare/Medicaid)? How will facilities outside of the immediately impacted area, which are expected to see significant spillover, be reimbursed?
- How will standards of care be redefined in the impacted jurisdiction, and potentially surrounding areas to accommodate the demand for healthcare services? Standards of care may also need to be redefined nationwide for individuals treated for anthrax exposure as the medical impacts of treatment become more understood.
- Is it a priority to keep the public health infrastructure and medical system solvent in the contaminated area? If so, should the system be subsidized? This event may have dramatic financial impacts on local government resources and healthcare organizations. Many private and non-profit healthcare institutions may become insolvent, while local tax revenues that fund public health services may be significantly reduced. How will the healthcare and public health

infrastructure of a community be maintained when the most significant impacts do not include structural or infrastructure damage, but financial collapse?

- Who owns and orders health, medical, and decontamination resources? Will such decisions go through normal channels or will a health commission (or some other body) “own” the resources and control how they are dispersed?
- Who will be responsible for covering the long-term care costs of anthrax victims?
- What are the cleanup risk levels? Who decides and certifies those levels?
- Will there be an exception to Industry New Drug Protocols (IND Protocols) to relax them for anthrax-related medications and vaccines?
- Will the U.S. Food and Drug Administration (FDA) make antibiotics to treat anthrax over-the-counter (OTC)? Making anthrax treatment options openly available could have a significant impact on recovery (see Section 3.4.2 - Economic Development).
- Will lawsuits by the families of the deceased be allowed? These lawsuits may include claims of negligent treatment and incorrect (because of a lack of knowledge) dosing for prophylaxis and unreasonable expectations about medical care on the part of upset family members.
- Will capacity lost to the attack be rebuilt or replaced?

Phase 2: Cleanup

Scope: Conducting parallel efforts that address implementation of a surveillance plan, ongoing environmental monitoring, and participation on the team communicating about public health (see Section 3.4.7 - Public Messaging). This phase places a greater emphasis on communicating; however, any spikes in anthrax-related death rates will result in more emergency response actions. Differentiating between anthrax-related deaths and deaths from other causes will also be challenging.

Support Function: Local health departments, the Washington State Department of Health, CDC, EPA, and the Washington State Department of Ecology. Cross-jurisdictional coordination should be underway.

Considerations:

- An anthrax attack may result in the deaths of thousands and abandonment of familiar surroundings. Such an attack will likely cause significant and long-term mental health issues
- Rates of mental health issues and depression will likely increase for those who have elected to stay in the region and those who left. Domestic violence, divorce, increased crime, suicide, and clinical depression are some examples of

short-term effects. Given the number of deaths, communities throughout the country may be directly impacted as friends and relatives learn of the fate of their loved ones. A comprehensive, nationwide, proactive approach to mitigating the mental health impacts will likely be needed. Communication and access to mental health professionals are keys to mitigating these impacts.

Policy-Related Issues:

- There will be increasing focus on how to sustain and maintain solvency of the medical health care system.
- Agencies need to reach an understanding of who can direct and manage decontamination teams (see Section 3.5 - Direction and Control).
- What will be the role of government in supporting families of the victims of the attack? Will families receive additional benefits to compensate for the loss of family members?

Phase 3: Reoccupation

Scope: Maintaining a strong emphasis on communication as the region returns to mostly normal, day-to-day operations with occasional response activities associated with spikes in the death rate from anthrax. A massive effort to process and analyze the data from the recovery will be underway.

Support Function: Public health may assume its normal duties, and local public health departments should serve as advisors at this stage with respect to communicating. Cross-jurisdictional coordination should be underway.

Considerations:

- Serious mental health issues will continue to need to be addressed.
- As part of reoccupation, incentives may be needed to encourage medical professionals and health care organizations to reoccupy the area.

Policy-Related Issues:

- Who will pay for long-term acquisition of mental health providers and services? For whom will they work?
- Who determines reoccupancy risk levels?
- What levels of preventative medical care will be necessary for people living in or visiting the area?

Phase 4: Legacy

Scope: At this stage, environmental health impacts (i.e., soil, water, air, food) should be assessed at the national level, and “living with anthrax” should be a component of day-to-day routine public health and medical services operations.

Support Function: Public health - environmental health division. Cross-jurisdictional coordination should be underway

Considerations:

- Mental health issues should normalize. As people adjust to the “new normal,” psychological well-being and health issues should return to normal levels.
- Long-term impacts of anthrax prophylaxis may become known, potentially leading to major health issues.
- The massive doses of antibiotic treatment may lead to secondary impacts to the immune system, rendering it less resistant to other disease. Particularly if, during the other phases, antibiotics for anthrax were made OTC drugs.

Policy-Related Issues:

- How long does public health continue its monitoring efforts?
- How long will the public sector provide healthcare for victims and individuals living in the cleaned areas?
- Will there be issues with predisposed conditions secondary to the incident?
- Who addresses claims associated with the anthrax attack in the long term? For example, if it turns out that prophylaxis causes a higher incidence of cancer, who is responsible for any civil judgments rendered?
- Will anthrax vaccination become a universal recommendation for the U.S. population?

3.4.7 - Public Messaging

Public messaging takes place in two primary ways:

- Official communication to the public
- Interagency message coordination through the JIS, which harmonizes all public messaging across agencies and jurisdictions.

A large-scale incident will require extensive coordination of information to minimize miscommunication, which could seriously impact recovery time, both with the public and in the interagency process. Additionally, with public messaging, effective risk communication will be vital to shortening the recovery time through all phases, including response. The messages should be coordinated but may not be identical in all areas because of the localized differences in the impact of the attack. Conflicting scientific viewpoints on decontamination, vaccinations, and general anthrax-prophylaxis may present a significant challenge to establishing public trust. Public communication may take on different considerations as it transitions from phase-to-phase, but it will remain important throughout recovery, shifting from crisis communications to public relations.

Emergency Response Assumptions: The following actions taking during emergency response will impact public messaging during recovery:

- JICs will be formed in the JFO and each impacted emergency operations center (EOC).
- A JIS will be established to coordinate JICs.
- Messaging should be coordinated and presented by authoritative voices to maintain public confidence. Diversion from the message may have a negative impact on the recovery because of the associated decline in public confidence.

Recovery

Phase 1: Planning

Scope: Conducting official communication to the public and coordinating interagency messages to harmonize all public messaging across agencies and jurisdictions.

Support Function: JFO as the lead to the JIS

Considerations: While many public messaging issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Spokespeople for the incident should be established and used consistently.
 - Spokespeople should include individuals who are credentialed, unified with the official public message, recognizable, and trustworthy to the local populations.
 - More than one person will be needed to communicate with different audiences. Examples include the local health officer and elected officials.
 - Multiple disciplines may compete over messaging, but it is important that subject matter experts and agencies balance interests to provide a clear message that will support recovery objectives.
 - Spokespeople may vary by jurisdiction, but, for continuity and to build trust, the number of spokespeople delivering messages to different audiences should be limited.
 - The public may self-select the spokesperson, similar to what happened with the September 11, 2001, attacks.
- Public health communication is urgently needed.
 - Under the coordination of the JIS, public health agencies will communicate to the public the nature of the threat and information about access to medical services and resources. The primary goals of this communication are to allay fears, articulate which populations are at the highest and lowest risks, assess the threat, and detail the appropriate treatment to the general public. It must also be able to articulate to the business community the long-term health impacts to support long-term economic recovery. Communication will remain very important and should be coordinated with EPA, CDC, and other DHS entities.
 - New guidance and information about treatment may need to be communicated to the many thousands of providers in the region. Each jurisdiction has established a method of communicating this information, utilizing various technologies.
 - Communicating with special needs populations such as recent immigrants, those speaking foreign languages, and the homeless may be very difficult.
 - Communication regarding mental health should begin in this phase and continue throughout recovery.
- A template should be developed for crafting public messaging and used to maintain consistency in message presentation.
- Transparency and visibility of the recovery process is important. A radically more complete mechanism is needed to allow dissemination of government information other than traditional outreach. This information will include

detailed records of the incident and recovery planning. The public and private sector may have more confidence if they have more information. Many forums exist to support this effort, including community meetings, access to information about contractors, etc.

- The JIS will work to promote a strong message and, if needed, address conflicting or erroneous information. Anti-government and negative messages may increase. It may be useful to identify a proactive crisis communication strategy.
- The public message will be communicated across a wide-spectrum of media, including the traditional print media, video media, radio, and social media.
- PIOs should engage with community leaders, NGOs and non-profits to help deliver the message.
- The JIS membership may have an impact on how information is communicated and how effectively information is communicated. The JIS should include both civilian public information officers (PIOs) and military Public Affairs Officers (PAOs).

Policy-Related Issues:

- The agency responsible for crafting public messages about each topic must be clearly identified. According to the National Incident Management System (NIMS), a PIO will be a member of the command staff and may be supported by assistants. All messages need to be approved by the Incident Command.¹⁰ However, in recovery, many of the response command structures may disappear and the RRTF may be coordinating recovery operations. Will responsibility for message approval shift to the RRTF? How will this guidance be given? Normally, the JFO (or Incident Command) provides guidance.

Phase 2: Cleanup

Scope: Conducting regular, day-to-day communication across the region in the JICs, with critical messages going through JIS unified messaging approach. Official public communication may shift toward the public relations discipline. All levels of communication are engaged; however emphasis is on messaging from the locals rather than federal government and be characterized by more communication to and from the private sector.

Support Function: Local agencies with JFO involvement

¹⁰ FEMA. National Incident Management System. 2008, pg. 92.

Considerations:

- Same items as previous phase
- All levels of communication are engaged in the process; however emphasis is on messaging from the local rather than federal government. Efforts will also be characterized by more communication to and from the private sector.
- As much information as possible must be available to the public to keep people from filling in blanks with incomplete information. Overwhelming amounts of unnecessary information risks confusing the public, which could lead to a trust deficit with the public. It may be useful to provide pamphlets of information. Topics could include legal issues, cleanup resources, and other important information.
- Decisions about messaging should be driven by local jurisdictions.
- During the shift to public relations, PIOs should continue to engage non-profits and other community groups to help deliver the message. Active engagement with the private sector will also be important (see Section 3.4.2 - Economic Development).
- A major national and international messaging and public relations campaign may be needed to begin re-establishing trust in the area's products (see 3.4.2 - Economic Development).

Policy-Related Issues:

- Some jurisdictions may make decisions that are unpopular in other jurisdictions which will necessitate close coordination among jurisdictions.
- What is the method for coordinating between federal and local communication priorities?

Phase 3: Reoccupation

Scope: Continuing to shift communication from response issues to economic recovery issues. All levels of communication are engaged; however emphasis now shifts to national level messaging, much like Phase 1 – Planning.

Support Function: Local agencies, with input from the JFO

Considerations:

- Same items as previous phase
- There may be value in hiring an experienced public relations firm to help rehabilitate the area's image. This effort should be global and needs to show that the region, its inhabitants, and its resources are safe.

- Messaging to the private sector should have a higher priority than that to the general public to bring business into the area and provide the infrastructure necessary to reoccupy the area.
- Agencies need to execute a major campaign to promote business opportunities in the region, recruit businesses, retain workers, and promote the area.
- Public health messaging should include issues such as
 - Anger management
 - Guidance for recognizing signs of mental distress
 - Information about risks from anthrax
 - Infectious disease or flu
 - Encouragement for people to continue medical treatment as needed to avoid additional spikes in the death rate from anthrax.
- To establish trust, the JICs should provide information to the public about cleaning processes and inform them about actions they can take.
- Politicians, public figures, and cities may compete for air time and may have a negative impact on communications.

Policy-Related Issues:

- No change

Phase 4: Legacy

Scope: Returning to standard coordination issues and responsibilities as well as long-term public relations

Support Function: Local jurisdictions

Considerations:

- Standing contingency plans should address contamination in the long term and response to outbreaks and spikes in infection.
- The group charged with public messaging for the recovery should continue its work well into the legacy phase.
- Scientific studies and historical references will serve as the greater focus of communication. This effort may include the creation of a repository of lessons learned, medical articles, and information about studies during cleanup.
- As new technologies and pharmaceuticals become available, information about them should be disseminated through normal channels to communities.
- A public education campaign promoting general anthrax awareness, immunization, and other issues should be continued.

Policy-Related Issues:

- Who is in charge of long-term recovery concerns? It would be useful to establish a new state, federal, or local body to hold that responsibility through legislation.

3.4.8 - Identify, Stabilize, and Maintain Infrastructure and Property

This function applies to actions taken to preserve property and mitigate secondary impacts as a result of the initial incident. It encompasses maintaining and operating critical infrastructure, buildings, and areas to prevent their degradation, including privately owned property that has been abandoned or otherwise falls under the purview of government authority as a result of the incident. Some buildings may be sealed for later cleaning or demolition; however, existing literature considers this a less cost-effective solution than immediate remediation. Whether this would still be true in a large-scale disaster affecting a large number of buildings is unclear.

A widespread anthrax attack may result in widespread abandonment of property, whether voluntarily or as a result of death and illness. Much of this property may be either key infrastructure to support economic recovery or a potential hazard if allowed to degrade. Degradation could occur as the result of improper rendering of the facility before evacuation or normal wear and tear over several years. Additionally, if not properly maintained, secondary risks from mold, structural degradation, or fire could seriously impact recovery.

Stabilizing property will be a pertinent to Phases 1 and 2, with a limited scope in Phase 3 as the population returns to the area. It is not relevant in Phase 4.

Emergency Response Assumptions: The following actions taken during emergency response will impact identification, stabilization and maintenance of property during recovery:

- A perimeter will be established and the area evacuated so that the population is significantly reduced. Security of the area will have been established with the understanding that hostile elements and dangerous environments may exist inside the perimeter and not all of the population will have evacuated.

Recovery

Phase 1: Planning

Scope: Preserving property and mitigating secondary impacts.

Support Function: Local jurisdictions

Considerations: While many of the issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- The owners of private facilities may need to be contacted to determine their plans for the facility. If ownership is in doubt, local government may assume control of the property.
- All buildings should be inspected and rendered safe. Owners that retain control of their property may conduct the inspection as authorized by permit and following procedures published by the local jurisdiction. Property owners may grant permission for the local jurisdiction to conduct the inspection for them. Inspection teams under the control of the local jurisdiction should inspect abandoned or seized property.
- A detailed description of the building and a maintenance plan should be placed on file with the RRTF.
- Costs will need to be assessed for different forms of disposition (cleanup, demolish, or seal and demolish later) for each building to help with decision making processes.
- Buildings may be demolished, but additional scientific issues regarding the safety of demolition should be resolved.
- Inspectors should check compliance and quality with private facility owners who retain ownership and control over their property to ensure that facilities do not pose a risk to the CAP Teams, recovery, or any other property in the area.

Policy-Related Issues:

- Enforcement authority for assessments and quality checks needs to be established through the RCW and local law.
- Legal authorities need to be defined as they relate to access and acquisition of private property. This definition may require additional legal review as there is currently disagreement regarding this authority.
- What will happen with facilities that owners surrender, fail to claim, or fail to maintain and clean? Will these facilities be sealed and left, or will the local authority take ownership? If they are sealed, is that a permanent or semi-permanent solution?

Phase 2: Cleanup

Scope: Preserving property and mitigating secondary impacts

Support Function: Local jurisdictions

Considerations:

- A coordination mechanism is needed between CAP and remediation teams. Much of the work should have transitioned from assessment to maintenance, and adequate records need to be maintained of maintenance and remediation efforts in buildings.
- Facilities may require continual maintenance as things break or fall into disrepair.

Policy-Related Issues:

- How do jurisdictions pay for continuing building maintenance to ensure that buildings are not falling into disrepair after they were initially rendered safe but have not yet been cleaned?

Phase 3: Reoccupation

Scope: Preserving property and mitigating secondary impacts until ownership and responsibility to maintain property has been transferred to private owners

Support Function: Local jurisdictions, then private owners

Considerations:

- A mechanism is needed to confirm ownership of property, and a protocol is needed for transferring property to original or new owners.

Policy-Related Issues:

- How will liability for building maintenance be addressed as ownership is transferred?
- What level of building inspection will be required before a building is certified for reoccupancy?

3.4.9 - Volunteer and Donation Management

Volunteer and donation management are two separate issues contained within one functional area.

Volunteer management is the effort to efficiently and safely direct volunteer resources to areas where they can be most effective. Volunteers fall into two categories, spontaneous volunteers and affiliated volunteers, each with its own distinct set of roles and needs. Spontaneous volunteers are people who show up to volunteer but are not associated with any major volunteer organization. Spontaneous volunteers may present a safety or security risk and need to be managed effectively. This group is least likely to be properly trained and organized. Additionally, this group consists of experts that are self-deployed with a special set of skills, but no affiliated volunteer organization. These people are likely to be associated with a professional society, and possess a key skill set required for recovery. These volunteers' credentials will require verification. They also require the most logistical support and direction. Affiliated volunteers are people working within the existing structure of a major volunteer organization. This group is likely to operate semi-autonomously within the organizational structure of their volunteer group. A large-scale incident such as a wide-scale anthrax attack will require volunteer management because, in nearly all disasters, there is a large influx of volunteers. Even during an incident presenting medical danger and characterized by uncertainty, some people are expected to choose to volunteer. Additionally, volunteers will be needed in areas outside of the "hot zone" whose risk of contamination exposure should be much lower. All volunteers should be coordinated, work toward recovery goals set forth in this Framework (see Section 3.4.2 - Economic Development), and be managed by the RRTF to maintain an efficient and effective recovery effort. Volunteers may be important in the first three phases of recovery and are likely to be less important in the legacy phase.

Donation Management is the effort to effectively and efficiently coordinate and distribute donated goods and money to those in need. A large-scale incident like a widespread anthrax attack may require donation management, because many people may feel compassion or pity for the victims and provide extensive resources to help them. Some of these goods may be useful, and others may not. A process will be needed to make sure that the donations are not wasted and that useless goods do not clutter supply chains. Donation management may be important during all phases of recovery.

Emergency Response Assumptions: The following actions taking during emergency response will impact volunteers and donations during recovery:

- Work to establish Volunteer Reception Centers (VRCs) will begin immediately.

- Volunteers may begin showing up before access control is established and VRCs are operational.

Recovery

Phase 1: Planning

Scope: Volunteer Management – Receiving, screening, training, and deploying volunteers to areas in need of support

Donation Management – Receiving, sorting, cataloguing, testing/clearing, storing, and dispersing goods and money to areas and people in need of support

Support Function: Local aid groups [such as the Washington State coordination group, WA Volunteer Organizations Active in Disasters (WA VOAD)] and similar groups in local jurisdictions. Currently there is no over-arching command structure. Each county organizes differently. Additionally, affiliated groups are well organized and have their own processes.

Considerations: While many volunteer and donation management issues will begin to be addressed in the immediate emergency response, during the planning phase of recovery the region will need to consider the following:

- Volunteers
 - All volunteers must operate under Washington Administrative Code (WAC)-118 requirements including a background check. Any agency signing off on volunteers takes on the liability for that person’s behavior.
 - A large number of spontaneous volunteers may arrive in the impacted area to assist with the response and recovery efforts. Some may be willing to enter the affected area. All should be processed through the VRC (for a VRC SOP and information, see the RCPG’s *Draft Volunteer and Donation Management Template: Volunteer Reception Center Standard Operating Procedures Template*, 2010).
 - VRCs should be set up based on the need to manage spontaneous volunteers and make them a useful part of recovery. VRCs need to meet the guidelines of WAC-118 to ensure that volunteers have liability coverage and that hours are properly tracked for reimbursement purposes. Not all VRCs will necessarily have been established by the start of Phase 1. Additional work may be required to finish setting up other necessary VRCs.

- Spontaneous volunteers will require extensive training before deployment, which should be conducted through the VRC. Appropriate training and trainers will need to be available.
 - Housing for volunteers may be a problem, and decision makers should identify appropriate living quarters.
 - Volunteers may need full healthcare, housing, and other means of support. Major liabilities may arise if something should go wrong. Good records will be important for any future legal action.
 - Medications and vaccinations must be available and distributed to volunteers.
 - Medical care should be available for volunteers who do not have their own healthcare.
 - Requests for support will likely come through the VRC, and the center should identify volunteers who can help fulfill the requested needs from the spontaneous volunteer group. The requesting agency should ensure that the dispatched volunteers are qualified before putting them to work. (A format for volunteer requests can be found in the RCPG's *Draft Volunteer and Donation Management Template: Volunteer Reception Center Standard Operating Procedures Template*, 2010, Tab C). During a regional disaster, local governments, volunteer groups, and agencies may be adversely affected and may not be able to cope with a sizable influx of spontaneous volunteers.
 - Volunteers may need credentials to enter and exit the impacted area and may also need "Volunteer ID cards" (see RCPG's *Draft Volunteer and Donation Management Template: Volunteer Reception Center Standard Operating Procedures Template*, 2010, Tab C - Volunteer ID cards).
 - Military volunteers will be available and dispatched by their respective EOCs for help inside the installation. The EOCs may be able to help coordinate with groups like the Veterans of Foreign Wars.
 - Any uniformed volunteers will go through the Defense Security Cooperation Agency.
 - Communication about VRC operating procedures will be important to manage expectations about background investigations and other time-consuming elements of volunteering.
- Donations
 - A process will need to be established to identify and credential aid shipments for transit into the impacted area.

- A tool like AidMatrix may be used to coordinate donations and track their deployment.
- A huge quantity of undistributed donated goods and money may require cataloguing and sorting. Cash should be the priority item for donation.
- A large public communication campaign should ask people to donate cash, as opposed to goods, which create a logistical and waste disposal issue.

Policy-Related Issues:

- How can resources be deployed in a coordinated fashion? Perhaps an overarching group within the RRTF (RRTF-VOAD) would be useful to coordinate local efforts. Another option is to create a Volunteer Multi-Agency Coordination (MAC) group. (MAC Group Definition is in 11.3 - Appendix 3 - Description of ICS Elements – From NIMS.)
- Completing the number of background checks required for a large-scale incident will be a problem. Currently, the law stipulates that the agency utilizing volunteers takes on liability for their actions and any damages they cause or incur. This liability can severely limit the dispatching of volunteers. Identifying a general waiver of liability for use of volunteers would be helpful to avoid key bottlenecks in the screening process. Specific guidelines are also needed for when and how liability will be addressed.
- Will volunteers be used inside of the contaminated zones? This use may require categorization according to their skill sets.
- Who provides oversight for volunteers and donations?
- Will locals provide housing and support for volunteers?
- Is there a means of providing financial reimbursement that is not currently covered by WAC-118?
- How are donations allocated?
- What tax deduction changes will offer incentives for people to give more with less hassle – changes to caps, need for receipts?

Phase 2: Cleanup

Scope: Volunteer management – Receiving, screening, training, and deploying volunteers to areas in need of support

Donation management – Receiving, sorting, cataloguing, storing, and dispersing goods and money to areas and people in need of support

Support Function: Local aid groups (NOTE: There is a Washington State coordination group, “WA Volunteer Organizations Active in Disasters (WA VOAD),” and many similar groups in local jurisdictions. Currently there is no over-arching command structure. Each county organizes differently. Additionally, affiliated groups are well organized and have their own processes.)

Considerations:

- PPE may be necessary for volunteers.
- Work completed, hours committed, and any contacts with contamination should be tracked.
- A process should be established for reporting problems or issues with volunteers.
- Law enforcement will likely need to address volunteers committing crimes.

Policy-Related Issues:

- Should volunteers be paid?
- Can volunteers who helped with recovery activities transition into employment?
- Some volunteers come because they have no job and/or no home. Will the government consider them a higher priority during reoccupation and for recovery jobs?

Phase 3: Reoccupation

Scope: Volunteer management – Receiving, screening, training, and deploying volunteers to areas in need of support and supporting the recovery by providing opportunities for unemployed residents to contribute by volunteering

Donation management – Receiving, sorting, cataloguing, storing, and dispersing goods and money to areas and people in need of support

Support Function: Local aid groups (NOTE: There is a Washington State coordination group, “WA Volunteer Organizations Active in Disasters (WA VOAD),” and many similar groups in local jurisdictions. Currently there is no over-arching command structure. Each county organizes differently. Additionally, affiliated groups are well organized and have their own processes.)

Considerations:

- During recovery, volunteering may help support both the community and people while they are unemployed. Volunteers can work on projects to support reoccupation and recovery that otherwise would not receive much focus. Such

volunteering may have psychological benefits for the unemployed and generally support the objectives of recovery.

- The number of volunteers from outside of the area may begin to decrease. However, large aid missions may be deployed to the area to support reoccupation. In many disaster areas, celebrities have brought aid missions that received extensive media attention (see Section 3.4.7 - Public Messaging).
- Legal challenges regarding volunteer exposure to anthrax or side-effects from treatment will likely begin to crop up.

Policy-Related Issues:

- Will legal claims be allowed? What is the appropriate chain for any claims? There will likely be a number of claims for payment of damages caused during the attack and cleanup.
- There will be disagreements about the allocation process for volunteers and resources. How are priorities defined?
- Will celebrities be allowed to enter the area for publicity purposes?

Phase 4: Legacy

Scope: Volunteer management – Phasing out volunteer management. Many of the roles previously assigned to volunteers should be transitioned into jobs, perhaps under the authority of the agency in charge of long-term monitoring and recovery.

Donation management – Receiving, sorting, cataloguing, storing, and dispersing goods and money to areas and people in need of support. This effort will gradually phase out and may be replaced by an effort to dispose of excess or unnecessary goods.

Support Function: Agency charged with long-term monitoring and recovery

Considerations:

- What happens to extra donated items? Some groups will need to close out financial funds, complete paperwork for donated items, and track tax considerations.

Policy-Related Issues:

- Which agency is charged with long-term monitoring and recovery? (See Section 3.5 - Direction and Control.)
- Will there be long-term monitoring of volunteers? Who conducts the monitoring? For how long?

3.4.10 - Waste Disposal

Waste disposal is associated with clearing debris and waste contaminated by anthrax. Disasters often create large amounts of waste that must be managed as part of both immediate response and long-term recovery processes. While many federal, state, and local agencies have debris management plans, these plans often do not address chemical, biological, and radiological contamination resulting from a terrorist action. In the case of wide-area anthrax contamination, a wide range of material is anticipated to require decontamination and disposal. This debris may include furniture, carpeting, sludge, building material, common garbage, and animal carcasses. Waste disposal will likely have a major role in Phases 1 through 3 of recovery but may be most important during Phase 2 – Cleanup. By Phase 4, most major cleanup activities will have been completed, and waste disposal should have reverted to normal operations with ongoing monitoring of the dump sites for anthrax-contaminated waste.

Emergency Response Assumptions: The following actions taken during emergency response will impact waste disposal during recovery:

- If populations evacuate, care centers may be set up and generate additional areas for decontamination and waste management. Response agencies should decide if these care centers are warm zones or cold zones and how much decontamination incoming populations will require. This decision may increase the amount of waste for disposal and impact whether it is contaminated waste or regular solid waste.
- The regulatory scheme and agency in charge may be uncertain, but a command structure should be set up (see Section 3.5 - Direction and Control).
- Existing debris management plans identify debris sites for disasters. For a template of the UASI debris management plan, see the *Seattle Urban Area Disaster Debris Management Plan*.¹¹
- Because of anthrax perception, recycling may not be an option, and all anthrax-contaminated waste will need to be decontaminated and disposed of in an acceptable manner.
- Because the classification for anthrax-contaminated waste is not clear, treatment and disposal methods may be uncertain.
- There may be shortages of trained people to characterize, treat, and dispose of waste properly.

¹¹ The UASI plan is a framework for the entire urban area and does not discuss operational details. Individual jurisdictions have adopted their own Disaster Debris Management Plans that include the operational information necessary to execute the framework.

- There may be shortages of facilities, equipment, and techniques to test and clean affected areas.

Recovery

Phase 1: Planning

Scope: Disposing of a variety of materials such as furniture, computers, carpeting/drapes, building/construction materials, common garbage, animal carcasses, and water

Support Function: At the federal level EPA is the lead organization along with FDA/USDA and HHS/CDC. The state level leads would be the Department of Ecology and the Department of Health. The lead at the local level would be health districts/departments with assistance from local emergency planning and response agencies, local public works departments and waste collection agencies and organizations.

Considerations: These considerations consist of a basic checklist of information to be gathered to support decision making about waste disposal:

- Types of waste
 - Location
 - Volume
- Reconnaissance personnel
 - Number available
 - PPE
 - Training
 - Locations for decontamination activities
 - Location for storage of “cleaned” materials
- Wastewater
- Decontamination
 - Treat in place or not
 - Methods
- Effectiveness
 - How to determine if clean
 - Who makes the determination
- Disposal Options
 - Contracts in place
 - Landfills
 - Incineration
 - Autoclaves
 - Waste Water Treatment Plant
- Transportation methods, special requirements, and contracts

- Public messaging for disposal of waste and cleanup options for remaining residents (see Section 3.4.7 - Public Messaging).

In addition, the following factors should be considered:

- Gaining public acceptance of nearby waste disposal may be challenging. The public will most likely need to accept areas through which waste is transported.
- Prioritization of cleanup should take into account the demands for waste disposal (see Section 3.4.5 - Prioritization of Cleanup).
- There may be a lag between cleanup and waste disposal readiness while personnel are trained for everything from transportation to final disposition of the contaminated waste.
- Unions could present a challenge for quickly scaling up the capability of local waste haulers and treatment centers to handle contaminated waste.

Policy-Related Issues:

- Under what regulatory classification does anthrax fall?
- How do agencies verify that the materials are clean? Which level of lead agency will make that call?
- What regulations apply to transporting waste, and what transportation methods are viable/allowable?
- Will the waste be treated in place and then transported, or will it be transported and then treated?
- What regulations and policies are needed to transport waste across jurisdictions?

Phase 2: Cleanup

Scope: Disposing of most of the waste. This phase may include the following activities:

1. Waste characterization
2. Decontamination
3. Waste clearance
4. Waste transportation
5. Decontamination site restoration.

Support Function: At the federal level EPA is the lead organization along with FDA/USDA and HHS/CDC. The state level leads would be the Department of Ecology and the Department of Health. The lead at the local level would be health districts/departments

with assistance from local emergency planning and response agencies, local public works departments and waste collection agencies and organizations

Considerations:

- Availability of trained personnel and methods to increase the number of available resources for waste disposal activities may be an issue.
- Re-aerosolization of anthrax spores during transport or processing of waste materials could present a health hazard.
- Appropriate transportation methods need to be identified, including those for loading, routing, and unloading.
- Final disposal sites should be designated by waste type (contaminated versus uncontaminated material).
- Housing for waste disposal workers may be needed (see 3.4.4 - Post-Disaster Housing).

Policy-Related Issues: If not already addressed in Phase 1, the same policy issues may need to be addressed in Phase 2.

Phase 3: Reoccupation

Scope: Disposing of increasing amounts of waste. As residents and business owners return to their property, increased amounts of normal waste may be generated. Additionally, waste may increase as those returning renovate and re-establish a home environment. This phase may begin while cleanup activities are ongoing in other areas, meaning that Phase 2 and Phase 3 waste disposal activities may occur for a period of time in parallel.

Support Function: Local public health and maybe local jurisdictions responsible for waste disposal.

Considerations:

- To prevent unnecessary self-decontamination in areas that have already been decontaminated and certified, impacted populations will need to be assured that their facilities are safe. Any unnecessary self-decontamination efforts may increase the amount of waste produced during this phase.
- Cleanup and long-term environmental monitoring may be needed at temporary waste treatment and storage sites in areas that have been reoccupied.

Policy-Related Issues:

- How will liability for waste or damage caused during processing and transportation of waste be addressed? Lawsuits are more likely during this phase.

Phase 4: Legacy Phase

Scope: Conducting long-term environmental monitoring of sites exposed, both in passing and in process, to contaminated waste. Additionally, workers may need long-term monitoring to track any additional medical concerns arising from employment.

Support Function: EPA, state Department of Ecology, and public health

Considerations:

- Waste disposal sites, transportation routes, temporary waste storage sites, waste treatment facilities, trucks, and other facilities associated with the anthrax-contaminated waste may need long-term monitoring.
- Workers may need long-term monitoring to track any medical complications associated with their employment.

Policy-Related Issues:

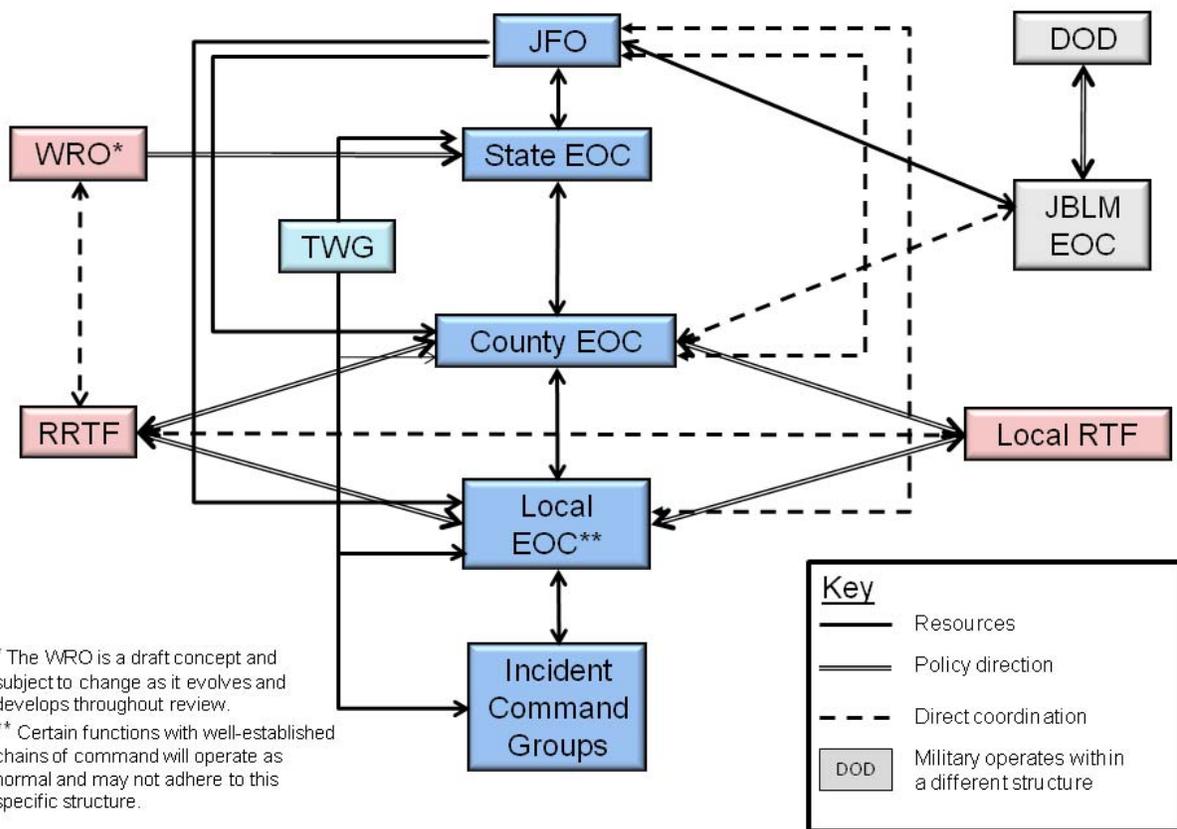
- What is the liability of the government for any lawsuits associated with long-term medical complications?

3.5 - Direction and Control

This section includes an organization chart for coordination for resource distribution, policy-making (3.5.1) and a discussion of the elements of the organizational structure for the recovery (3.5.2). It does not define command relationships. This is a coordination structure, based on the willful participation of all jurisdictions.

3.5.1 - Organization Structure

Figure 5 - Recovery Organization Chart



3.5.2 - Elements of the Organizational Structure

This section describes in greater detail the roles and interaction of the boxes from the organizational chart shown above.

3.5.2.1 - JFO – Federal

- Created after the Presidential declaration of a disaster.
- Provides a single coordinating structure for federal resource distribution in support of local decision making. It should not make strategic decisions or drive the recovery.

- Is not a “super-EOC,” but instead is a support structure for local EOCs.
- Connects directly to the state EOC during the recovery phase.
- Formed under the authority of the Unified Coordination Group, which is commanded by the Federal Coordinating Officer designated by FEMA.¹²

3.5.2.2 - Washington Restoration Organization¹³ (WRO) – State (Concept)

- Convened under the governor’s authority following a disaster declaration.
- Helps develop a long-term statewide restoration strategy through direct participation and assistance of affected local, state, and regional stakeholders.
- Coordinates strategy for ensuring the State Legislature and Congress maintain visibility of Washington’s restoration requirements.
- Helps prioritize restoration objectives, activities, and action plans and obtains the governor’s support and approval.
- Comprises representatives from the government and private sector. The organization will be led by a member of the private sector and/or a government official viewed as a coalition builder in the state.
- Provides outreach to local jurisdictions, within available resources, through a number of areas including liaisons and task force implementation.

3.5.2.3 - RRTF – Region (Concept)

- May be virtually or physically located and functions as a MAC Group.
- Coordinates policy decisions regarding issues that cross multiple UASI jurisdictions.
- Coordinates resource requests and acts as a single point of contact to the WRO.
- Comprises representatives of local jurisdictions and the private sector.
- Authority for this group does not currently exist.

3.5.2.4 - Local Recovery Task Force (RTF) – Local Jurisdictions (Concept)

- May be virtually or physically located.
- Is convened by local political authorities.
- Manages resource requests at the local jurisdiction and communicates those needs to the RRTF.
- Makes policy decisions regarding issues impacting the local jurisdiction.

¹² FEMA. National Incident Management System. 2008, pg. 64. The JFO is commanded by the Unified Coordination Group, which is commanded by the Federal Coordinating Officer (FCO). It will be the most senior available FEMA officer. There is a pre-designated regional FCO.

¹³ The WRO is a draft concept and is subject to change and approval as it evolves and develops throughout review.

3.5.2.5 - JBLM EOC

- Performs normal duties but retains mission capabilities throughout recovery.
- Receives policy direction from DOD entities.
- When resources are unavailable, makes resource requests through agencies such as the Department of the Army, Department of the Air Force, the Army's Installation Management Command, and U.S. Northern Command, with assistance from the Defense Coordinating Officer.
- Coordinates with local and tribal jurisdictions while maintaining cooperative efforts with Pierce County.

3.5.2.6 - State EOC - State

- Performs normal duties and opens and closes based on local jurisdictional needs.
- Sends liaisons to the JFO.
- Receives resource requests from counties and fills them when possible.
- Takes policy guidance from the WRO.
- Requests resources from the JFO.

3.5.2.7 - County Emergency Coordination Centers (ECC) - County

- Perform normal duties but remain active throughout recovery.
- Receive resource requests from local jurisdictions and fill them when possible.
- Provide area command support for unincorporated cities.
- Take policy guidance from the local (County) RTF and RRTF.
- Make resource requests to the state.

3.5.2.8 - Local EOCs - Local Jurisdictions

- Perform normal duties but remain active throughout recovery.
- Make resource requests to the County EOC.
- Manage city resources.
- Take policy guidance from the Local RTF.

3.5.2.9 - JIC - All Jurisdictions

- Element of NIMS.¹⁴
- Coordinates communication with other jurisdictions through the JIS.
- For more information, see Section 3.4.7 - Public Messaging.

¹⁴ FEMA. National Incident Management System. 2008. <http://www.fema.gov/emergency/nims/>

3.5.2.10 - Technical Working Group (TWG)

- Provides multi-agency, multi-disciplinary expert technical input to the planning and implementation of the cleanup effort to enhance decision making.
- May include representatives from federal, state, local, and tribal agencies, as well as experts from the private sector and local universities. For more information, see Section 2.2.2 of the *Seattle Urban Area Consequence Management Guidance*.
 - A policy decision needs to be made about how the TWG fits into the organizational structure. The location identified in the organizational chart (Figure 1 - Seattle Urban Area) is a suggestion for optimal access to all impacted jurisdictions.

3.5.2.11 - Interagency Situational Awareness

- Broad heading for activities to share information across agencies.
- Includes efforts to monitor the situation using all means available.
- Should include a common reporting format for situation reports to maximize information sharing. Home rule may prevent this, but a consensus-driven approach to developing situation reports may help. Existing protocols for sharing information across agencies may need to be expanded because of the wide scope of coordination required for an incident of this magnitude.

3.6 - Decision-Making Process

Because of the nature of this incident and its impact on the entire state, region, and nation, major strategic, policy decisions will likely need to be made in a collaborative environment. However, local responders and operators on the ground must have an efficient and simple communications structure for communicating needs upward and receiving resources. For this reason, two parallel structures are needed for communicating and planning from the state level to the local level.

Pending the completion of the RCPG All-Hazards Plan, the organizing principles of NIMS should be used,¹⁵ and the following organizational concepts adhered to:

- Jurisdictions should coordinate to identify, in advance, members that would make up the RRTF to help shorten recovery time.
- Individual jurisdictions retain their authority and operate as an area command, and the only way to make **regional** decisions is for every party to achieve consensus. Consensus should be achieved working through the RRTF. RRTF may be virtual and function like a MACC group (for a more detailed description of a MAC, see 11.3 - Appendix 3 - Description of ICS Elements – From NIMS).
- Tactical recovery decisions should be made from a bottoms-up approach. There will likely be a dynamic tension among local, state, and federal governments, and local jurisdictions will need to demonstrate competence and the capability to handle the situation so that federal and state actors do not feel obliged to intercede and take control.
- RRTF should make strategic guidance decisions and coordinate policy. Other disasters may require a response during the recovery phase of the anthrax attack, necessitating a flexible structure capable of surging to handle other emergencies.
- Information regarding resource needs and deployment should flow through the existing ECC/EOC communication chain used in everyday emergencies.

The following narrative describes the recovery organization chart (Figure 5 - Recovery Organization Chart) with respect to the proposed structure for resource requests and identification and resolution of policy-related issues.

3.6.1 - Resource Chain Organizational Structure

- The process by which the ECC/EOCs support resource needs should remain in place.

¹⁵ FEMA. National Incident Management System. 2008. <http://www.fema.gov/emergency/nims/>

- On the federal side of the EOC chain is the JFO, which inserts resources directly into the requesting jurisdiction.
- Resource requests should travel from the initial requesting jurisdiction up the chain, ending at the JFO. For example, if the Local EOC requests extra resources for one sector, it should ask the County ECC/EOC for the resources. If the County ECC/EOC has the resources, it should provide them to the Local EOC. If resources are not available, the County EOC should transmit the request to the State EOC. If the State does not have the resources, it should communicate the needs to the JFO.

3.6.2 - Policy Decisions Organizational Structure

- The recovery task force chain is intended to make strategic policy-level decisions.
- Each element should be established under the authority of the jurisdiction's highest political authority and have the authority to implement policies in its jurisdiction.
- The Local RTF would comprise local officials and stakeholders, and their policy decisions would apply to the agencies normally under their authority.
- The recovery task force chain should coordinate its policy decisions in line with the doctrine of this document to facilitate a rapid, complete recovery of the area.
 - Each level should have liaisons from the other levels and work together to maximize the distribution of resources and minimize recovery time.
 - The Local RTF should make policy decisions about its own jurisdiction and make recommendations to the RRTF.
 - The RRTF should make policy decisions on issues of a regional nature and make recommendations to the WRO.
 - The WRO would have the authority to make policy decisions that affect the entire state.
 - Prioritization decisions should be made at jurisdictional levels with input from both the WRO and RRTF.

3.7 - Key Decisions

A wide array of key policy decisions should be made during recovery. The following compiles key policy issues identified in Section 3.4 – Detailed Concept of Operations. These issues are deemed a high priority to recovery operations and are organized according to the phase in which they may first become an issue and divided by domain within those phases (general, legal, safety and health, security, development, waste, and finances).

3.7.1 - Phase 1 - Planning

3.7.1.1 - General Issues

- Will each body's cause of death be investigated and death certified?
- Where do bodies get sent for overflow capacity? Who decides that the area is no longer a crime scene and when?
- Major religious and cultural sensitivities are associated with death and disposition of corpses. What is the higher priority – thoroughly investigating deaths, maintaining strong public health protocols to prevent the outbreak of disease associated with improper storage of corpses, or following religious and cultural sensitivities?
- Will people be allowed to bury or spread the ashes of their loved ones in the contaminated zone if it holds special significance to them?
- How will interagency government situational awareness be fostered to maximize access to information for all involved jurisdictions, including at the federal, state, and local levels?
- The agency responsible for crafting public messages about each topic must be clearly identified. According to NIMS, a PIO will be a member of the command staff and may be supported by assistants. All messages need to be approved by Incident Command.¹⁶ However, in recovery, many of the response command structures may disappear, and the RRTF may be coordinating recovery operations. Will responsibility for message approval shift to the RRTF? How will this guidance be given? Normally, during a federal response, the JFO (or on a regular day, incident command) hands down guidance.
- Resources may be insufficient to care for everyone in the disaster area, so which priority populations should receive post-disaster housing? What priorities should be considered during planning for relocation and reoccupation?
- What will happen to facilities that owners surrender, fail to claim, or fail to maintain and clean? Will these facilities be sealed and left, or will the local authority take ownership? If they are sealed, is that a permanent or semi-permanent solution (this is both a technical and policy decision)?
- Is sealing a low-priority building an acceptable temporary solution? Technical guidance is currently unclear.

3.7.1.2 - Legal

- Who has the legal authority to limit or control access to private property over an extended period, beyond initial emergency response justification?

¹⁶ FEMA. National Incident Management System. 2008, pg. 92.

- Is the seizure of property when the owner refuses, is absent, or is unable to maintain and/or clean the property covered by RCW Title 8 - Eminent Domain?
- What redress do property owners have for being denied use of their property by the government in cases where private property must be disposed of because its composition is not capable of being cleaned?
- Can parents who refuse to immunize their children on religious or moral grounds be barred from taking them into contaminated areas?
- To preserve the value of certain rare items, can artistic, religious, and other unique or valuable items that, because of their composition, cannot be cleaned be removed from the contaminated area without being cleaned provided they are sealed in a tamperproof container?
- What shall be the penalty for entering a contaminated area without authorization? Under current law, doing so would be considered a misdemeanor with very little penalty, which would likely not be a sufficient deterrent.
- Religious doctrine may require that services continue to be held at certain places of worship in the contaminated area. Large numbers of adherents entering the contaminated zone to attend services could interrupt or overwhelm operations at the controlled access points. This could apply to religious services, burials, traditional celebrations and other occasions and applies to a great number of ethnic groups. Can such services be banned?
- Under what legal authority can private property be searched either during exit from contaminated areas or during cleanup operations within contaminated areas? During the long recovery phase, where “exigent circumstances doctrine” no longer applies, the authority of the government to search and seize private property must be clearly defined and authorized.
- If a mechanism for multi-jurisdictional cooperation does not exist, who has the authority to force it?
- Are there some laws that could/should be waived for certification of death and issuance of death certificates?
- In a situation like this, does the medical examiner/coroner retain jurisdiction over deaths for identification and certification of bodies?
- Who is responsible for decisions about when to stop doing autopsies for each body during waves of anthrax deaths? Is this addressed with the Washington State Attorney General’s Office?
- How will liability for workers be addressed if a worker dies from anthrax exposure during emergency response and recovery activities?

- Will requirements for accessibility that apply to emergency shelters continue to be enforced for post-disaster housing? For example, will Americans with Disability Act accessibility requirements continue to be a priority concern for planners?
- Will lawsuits by the families of the deceased be allowed? These lawsuits may include claims of negligent treatment and incorrect (because of a lack of knowledge) dosing for prophylaxis, and unreasonable expectations about medical care on the part of upset family members.
- Enforcement authority for assessments and quality checks needs to be established through RCW and local law.
- Legal authorities need to be defined as they relate to access and acquisition of private property. This definition may require additional legal review as there is currently disagreement regarding this authority.
- Will there be a general waiver of liability for volunteers to avoid key bottlenecks in the volunteer screening process? How will liability for volunteers be addressed?
 - There is a problem with completing the number of background checks required for a large scale incident. Currently, the law stipulates that the agency utilizing a volunteer takes on liability for their actions and any damages they cause or incur. This can severely limit the dispatching of volunteers. It would be helpful to identify a general waiver of liability for use of volunteers.

3.7.1.3 - Safety and Health

- What are the rules for site acceptance, and what is the authority for inspections? Do we follow normal standards and codes? Due to resource constraints, it may be useful to adjust standards and codes.
- How will standards of care be redefined within the impacted jurisdiction, and potentially surrounding areas, to accommodate the demand for healthcare services? Standards of care may also need to be redefined nationwide for individuals treated for anthrax exposure as the medical impacts of treatment become well understood.
- Is it a priority to keep the public health infrastructure and medical system solvent in the contaminated area? If so, should the system be subsidized? How will the healthcare and public health infrastructure of a community be maintained when the most significant impacts do not include structural or infrastructure damage, but financial collapse? This event may have dramatic financial impacts on local government resources and healthcare organizations. Many private and non-profit healthcare institutions may become insolvent, while local tax revenues that fund public health services may be significantly reduced.

- Who owns and orders health, medical, and decontamination resources? Will such requests go through normal channels or will a health commission (or some other body) “own” the resources and control how they are dispersed?
- What are the cleanup risk levels? Who decides and certifies those levels? It is assumed that EPA should be responsible for identifying these standards and that locals should be able to adopt or reject nationwide standards.
- Will there be an exception to IND Protocols to relax them for anthrax-related medications and vaccines?
- Will the FDA make antibiotics to treat anthrax OTC medications? It could have a significant impact in recovery to make anthrax treatment options openly available (See Section 3.4.2 - Economic Development).
- Will capacity lost to the attack be rebuilt or replaced?
- Will volunteers be used inside contaminated zones?
- Who provides oversight for volunteers and donations?

3.7.1.4 - Security

- Can private security firms provide perimeter security?
- Will neighboring jurisdictions initiate access control points to avoid (or limit) receipt of refugees?
- What is the common credentialing system and how will it be enforced?
- What level of force is reasonable to stop unauthorized ingress to, or egress from, contaminated areas?
- Will the military support or take command the incident over local law enforcement?

3.7.1.5 - Development

- What incentives will be established to retain businesses in the region, including mitigation measures to move businesses to other parts of the region that are not within the impact area?
- In some cases, facilities may be set for re-occupancy in weeks or months. Incentives should be prepared immediately for these cases. In other cases, it may be years before re-occupation can occur and preparation for new incentives to bring in new businesses during re-occupation should be a major key.
- Are there aspects of the State Growth Management Plan that should be modified to support recovery goals?
- How will land-use decisions be made? Who are the decision makers?
- How will repurposing decisions be made? Who are the decision makers?
- What types of incentives should be provided to encourage private sector participation in post-disaster housing efforts?

- Who sets cleanup priorities? Most likely this will be a combination of representatives for all the major interests, but this member list may prove unfeasibly long.
- What are the prioritization decision criteria and their weightings?
- How can resources be deployed in a coordinated fashion? Perhaps an over-arching group within the RRTF (RRTF-VOAD) would be useful to coordinate local efforts. Another option is to create a “Volunteer MAC” group. (For a definition of a MAC Group, see 11.3 - Appendix 3 - Description of ICS Elements – From NIMS.)

3.7.1.6 - Waste

- Under what regulatory classification does anthrax fall?
- How do agencies verify that the materials are clean? Which level of lead agency should make that call?
- What regulations apply to transporting waste, and what transportation methods are viable/allowable?
- Will the waste be treated in place and then transported, or will it be transported and then treated?
- What regulations and policies are needed to transport waste across jurisdictions?

3.7.1.7 - Finance

- How will medical care for the uninsured and underinsured be reimbursed for private medical companies, including providers, pharmacies, personnel, and other portions of the healthcare industry? Current funding for recovery does not address this need.
- How will private insurers be reimbursed? Will it be different for public insurers (Medicare/Medicaid)? How will facilities outside of the immediately impacted area, which are expected to see significant spillover, be reimbursed?
- Who will be responsible for covering the long-term care costs of anthrax victims?
- What are the policies for Medicare/Medicaid payment associated with anthrax contamination?
- Will locals provide housing and support for volunteers?
- Is there a means of providing financial reimbursement that is not currently covered by WAC-118?
- How are donations allocated?
- What tax deduction changes will offer incentives for people to give more with less hassle – changes to caps, need for receipts?

3.7.2 - Phase 2 - Cleanup

3.7.2.1 - General

- Some jurisdictions may make decisions that are unpopular in other jurisdictions. Who is responsible for communicating about these decisions?
- Who can direct and manage decontamination teams (For more information see Section 3.5 - Direction and Control)?
- What is the method for coordinating between federal and local communication priorities?

3.7.2.2 - Legal

3.7.2.3 - Safety and Health

- Who is approved to inspect buildings? Extensive demolition and remodeling are anticipated as a part of decontamination meaning that there is a need to surge building inspection to avoid long delays.
- What is the cleanup level? How much risk is acceptable? Will certain areas require less stringent cleanup? Who approves these decisions?
- Who is approved to do health inspections for cleanup levels and general health concerns? (Due to an expected large number of requests, there are probably not sufficient resources in place to support this need through normal channels.)
- Who is certified to clean up private sites, and what criteria should be used to make those certifications?
- Will housing be inspected (for building and safety codes) before occupancy or will that inspection requirement be waived or altered? The funding stream dictates whether or not inspections are necessary for building codes.
- What are the requirements for anthrax clearance inspections before a facility can be used for shelter?

3.7.2.4 - Security

3.7.2.5 - Development

- Should local jurisdictions approve preferential vendor-use policies and buy locally to spur economic growth? What policies and legislation are needed to do this?
- Will some sort of protection plan be put in place for displaced residents to suspend payment on their mortgages in the impacted area?
- What about new mortgages in areas of reoccupancy? Will there be a mechanism to protect consumers from risky lenders?
- Will rent be controlled in areas that receive displaced residents to prevent indirect economic damage, such as inflation, price gouging, or predatory lending?

- How will the prioritization framework be changed?
- Can volunteers who helped with recovery activities transition into employment?
- Will the government grant unemployed or homeless volunteers a higher priority during reoccupation and for recovery jobs?

3.7.2.6 - Waste

- How will jurisdictions near the contaminated area that oppose the transport of waste contaminated with anthrax through their community be encouraged to allow it?

3.7.2.7 - Finance

- What will be the role of government in supporting families of the victims of the attack? Will they receive additional benefits to compensate for the loss of family members?
- How do jurisdictions pay for continuing building maintenance to ensure that the buildings are not falling into disrepair after they were initially rendered safe but have not yet been cleaned?
- Should volunteers be paid?

3.7.3 - Phase 3 - Reoccupation

3.7.3.1 - General

- Will people be allowed to move the bodies of their loved ones to a burial site that is in the cleaned, reoccupied area? What are the key factors in making this decision?
- How are priorities defined in allocating volunteers and resources?

3.7.3.2 - Legal

- What is the strategy for access and how is it authorized legally?
- How does the government dispose of property that it acquired during cleanup? Will it be destroyed, auctioned, donated, or something else?
- How will liability for building maintenance be addressed as ownership is transferred?
- Will legal claims be allowed? What is the appropriate chain for any claims? There may be considerable claims for payment of damages caused during the attack and cleanup.

3.7.3.3 - Safety and Health

- What decisions must be made associated with stepped risk measures?
- Who determines reoccupancy risk levels?
- What levels of preventative medical care should be necessary for people living in or visiting the area?
- What level of building inspection should be required before a building is certified for reoccupancy?

3.7.3.4 - Security

- What is the strategy for access and how is it authorized legally?
- Will celebrities be allowed to enter the area for publicity purposes?

3.7.3.5 - Development

- Will government provide a safety net if someone tries to reestablish in the area after it is cleaned and the business fails? Will incentives be provided to allow relief for unexpected needs as business is slow at first? If so, what are the guidelines for making this judgment?
- How long with support be sustained for post-disaster housing? What happens to people who do not have the ability or resources to provide for their own housing when support is ended?
- Will people displaced by the incident be prioritized or given incentives to return to the area?
- Will resources be made available to people who want to relocate into the area? Does assistance exist?

- What incentives or deterrent can be used to encourage people to leave temporary (no matter what the duration of their stay has been) housing when they do not want to leave? In many cases, even the least attractive post-disaster housing solutions may be an improvement for some people, thereby reducing their incentive to leave.
- How will dependencies identified by the private sector and residents be reprioritized to support economic recovery?

3.7.3.6 - Waste

- How will liability for waste, or damage caused during processing and transportation of waste, be addressed?

3.7.3.7 - Finance

- How will damages of existing resources be repaired, and who will pay?
- Who will pay for long-term acquisition of mental health providers and services? For whom will they work?

3.7.4 - Phase 4 - Legacy

3.7.4.1 - General

- How will post-disaster housing be disposed of? What happens to trailer cities, shipping containers, tents, and other forms of post-disaster housing after they are no longer needed?

3.7.4.2 - Legal

- What is the “statute of limitations” for people to return and claim property?
- Is there a limit to the length of time they can claim issues with their homes or relocation homes from the incident?
- Are there disclosure issues for resale of facilities and areas that were contaminated and cleaned?
- What are the inspection changes/requirements?
- Who addresses claims associated with the anthrax attack in the long term? For example, if it turns out that prophylaxis causes a higher incidence of cancer, who is responsible for any civil judgments rendered?
- What is the liability of the government for any lawsuits associated with long-term medical complications?

3.7.4.3 - Safety and Health

- How long does public health continue its monitoring efforts?
- Will there be issues with predisposed conditions secondary to the incident?
- Will anthrax vaccination become a universal recommendation for the U.S. population?
- Which agency is charged with long-term monitoring and recovery? (See Section 3.5 - Direction and Control.)
- Will there be long-term monitoring of volunteers? Who conducts it? For how long?

3.7.4.4 - Security

- Who provides security for buildings and areas that are not cleaned?
- What are standards for providing security? Who enforces those standards?
- How much information about autopsies, procedures, and other associated actions will be released to the public about activities that took place in the first three phases?
- How much information about the prioritization decisions will be made public?

3.7.4.5 - Development

- Will there be a policy on incentives to encourage people to return to the area?
- If government subsidies and bailouts are provided, how long should they last for failing businesses? What are the guidelines?

- Who is in charge of long-term recovery concerns? It would be useful to establish a new state, federal or local body to hold that responsibility through legislation for monitoring and communication.
- What local statements will support new buyers and help sellers who may be interested in leaving for non-attack reasons (job, family, etc.) years later?
- Will government subsidize property to limit the impact of severely declined property values on recovery?

3.7.4.6 - Waste

3.7.4.7 - Finance

- How long will the public sector provide healthcare for victims and individuals living in the cleaned areas?

4.0 - Assignment of Responsibilities

The following table explains the roles and responsibilities of the involved entities in the context of this specific incident and provides suggestions for which agencies could lead and be involved in the RSF. The functional areas are drawn from FEMA’s Draft Recovery Framework.¹⁷ For an explanation of statutory authorities, see Section 10.0 - Local Authorities.

Table 1 – Recovery Support Functions

RSF #	RSF Name	Mission	Lead Agency	Primary Agencies	Supporting Agencies
1	Community Planning and Capacity Building	Unify capacity-building expertise and support programs from across the government to support local and state governments in restoring and improving their ability to provide governmental services and organize, plan, manage, and implement long-term recovery activities and initiatives	Strategic Development or Community Planning	Planning, Building Dept, Permitting agency	Environmental groups, non profits
2	Economic Development	Help rebuild businesses and develop new economic opportunities, with the goal of creating sustainable, economically viable communities	Same as above	Finance, Budget, government Relations, economic growth	Private Sector Community groups Business associations, chamber of commerce

¹⁷ For more information about FEMA’s national recovery working group and a copy of the Recovery Framework, go to <http://www.fema.gov/recoveryframework/>.

RSF #	RSF Name	Mission	Lead Agency	Primary Agencies	Supporting Agencies
3	Health, Social & Community Services	Provide support for a more resilient re-establishment of essential health/social/community services, to restore the health and well-being of affected people and communities - with particular attention to children, the elderly, families, and people living with disabilities, people with accessibility and functional needs, and underserved populations	Public Health	Public Health, Human Services, Non profits	Non profits, community groups, VOAD's
4	Housing	Coordinate resources and activities to assist in restoration of destroyed and damaged housing and development of other new accessible, permanent housing options, if necessary	Human Services	Human Services, HUD, Housing Authorities	Non profits, Real estate groups, landlord assoc.
5	Infrastructure Systems	Integrate the capability of the government to support communities, and other infrastructure owners and operators, to permanently restore, enhance, mitigate, and ensure the resilience and protection of infrastructure systems impacted by major and catastrophic disasters	Information Technology	Public, private infrastructure partners	

RSF #	RSF Name	Mission	Lead Agency	Primary Agencies	Supporting Agencies
6	Natural and Cultural Resources	Integrate resources and capabilities to help address long-term environmental and cultural resource recovery needs after major and catastrophic disasters	Non profit cultural groups, community groups	Non profit cultural groups, community groups	

5.0 - Logistics

This Framework is in coordination with local Comprehensive Emergency Management Programs (CEMPs) and does not supersede local plans.

6.0 - Financial Management

This Framework is in coordination with local CEMPs and does not supersede local plans.

7.0 - Human Resources

This Framework is in coordination with local CEMPs and does not supersede local plans.

8.0 - Assessment and Reporting

This Framework is in coordination with local CEMPs and does not supersede local plans.

9.0 - Framework Development

One of the major products produced by the Interagency Biological Restoration Demonstration (IBRD) Program was the Regional Recovery Framework for a Biological Attack in the Seattle Urban Area. This document provides the framework for local jurisdictional biological recovery plan development and identifies for a coordination framework for jurisdictions. This section describes the objective of the project, the approach and process for developing it and the lessons learned in the process.

9.1 - Objective

The objective of framework development was to help local emergency planners develop a planning document to shorten the timeline for recovery from a catastrophic biological incident.

9.2 - Approach

The approach to develop this framework was multi-jurisdictional, collaborative, transparent and locally driven. Representatives from all levels of government, private sector, media, the military, public health and the legal field supported it. Open-source information was used to the extent possible and FEMA's CPG-101 was used as the basis for the recovery framework.

9.3 - Process

The process of developing this framework was iterative and relied heavily on subject matter experts. Information was gathered for this framework from workshops, tabletop exercises, SME interviews and literature reviews. Utilizing DHS planning scenario 2 (widespread biological attack utilizing aerosolized anthrax) the IBRD team and representatives from the Seattle Urban Area Security Initiative (UASI) developed a local incident scenario and characterized potential damage from the incident. Additionally, needs-assessments were conducted to identify shortcomings in regional capabilities. Technical solutions were developed to support recovery objectives. An outline was developed by the IBRD team and the Seattle UASI. This outline was expanded over the course of a year and with additional input from SMEs through interviews, workshops and tabletop exercises. A core group of representatives (known as the group of 5.5) from the Seattle UASI was formed for review and development of the plan. This group met regularly to discuss framework elements. As development went forward ten key functional areas were deemed vital to execution of the recovery framework and developed more intensively (Section 3.4 – Detailed Functional Concept of Operations). The initial goal of developing a “plan” was changed to reflect the reality that a regional “plan” was not practical due to home rule. Each jurisdiction decided to utilize the regional framework to develop specific plans. The draft of the framework was submitted for review by SME from local, state and federal jurisdictions and the private sector.

9.4 - Lessons Learned

Throughout the development of the framework, a number of key lessons were learned.

1. CPG-101 is not well-suited to recovery planning. Many of the sections of the planning guidance do not apply to recovery and add confusion to the development process. The IBRD team initially drafted in CPG-101, but determined that early drafts for content would be better served by writing with a less formal structure. To meet the state requirement that all plans follow CPG-101, it was decided to convert later drafts to CPG-101, once the content was more adequately developed. This proved a more successful approach.
2. In this region, a framework was more appropriate than a “plan.” This is primarily because of “home rule” in the state of Washington. With the authority and responsibility for action resting at the lowest jurisdiction, a regional plan would become too complicated. However, it was feasible to provide a coordination framework that integrated higher level concepts, communicated key information and suggested mechanisms for cooperation.
3. It is important to work with a key group of planners until concepts have been adequately developed in order to maintain continuity of knowledge. Initially in the drafting process, various local representatives were consulted from all relevant jurisdictions. This was excellent for gathering information, but as drafts underwent revision it was difficult to have meaningful discussions. As a result, the “Gang of 5.5” was formed from the involved jurisdictions. These six people represented their agencies and met regularly to discuss drafts of the framework. This helped advance the discussions and avoid key inefficiencies, allowing for meetings to delve further into details and expand upon concepts more thoroughly.
4. Due to the public’s unfamiliarity with Bacillus anthracis, it is important to provide details about its impacts, the challenges of remediation, treatment and other information. It proved necessary at the beginning of the project to hold a symposium on anthrax to familiarize participants with the threat. Additionally, at future workshops SMEs on the scientific aspects of the disease were made available to answer questions.
5. Novel means of presentation were necessary to focus discussion on long-term recovery. Emergency management tends to focus on initial response issues. Longer term considerations like re-population of impacted areas received less attention during discussion than long-term recovery. The IBRD team identified this challenge early in the process and worked to address it many times. The most effective solution was to present scene-setters to workshop participants or interviewees. These scene-setters

typically identified the immediate impact of the attack and then focused on aspects of the recovery specific to certain time periods. For example, “by day 30 much of the population has self-evacuated and access control measures have been brought into force around the impacted area.” One of the most effective means utilized during a workshop was to provide a faux media report complete with pictures and a news reporter, followed up by a situation report from “area command” that detailed operational information for the time period under discussion.

10.0 - Local Authorities

This section is a collection of relevant laws, codes, and regulations that relate to this Framework. The references are drawn from the CEMPs of each jurisdiction.

10.1 - Bellevue

- Bellevue City Code Chapter 3.98: Emergency Services Organization
- Bellevue City Code Chapter 9.22: Mayor's Emergency Powers
- Bellevue Clearing & Grading Code, BCC (Bellevue City Code) 23.76.025, Permit Exemptions (emergency exemption)
- Bellevue Land Use Code, BCC 20.25H.055, Emergency Actions (Critical Areas Performance Standards)
- 2006 International Building Code Section 105.2.1, Administration, Emergency Repairs

10.2 - Pierce County

- Section 2.06 and 2.07, Pierce County Charter
- Chapter 2.118, Pierce County Code

10.3 - King County

- King County Board of Health Title 10,80, Solid Waste Regulation
- King County Code 2.56, Emergency Management
- King County Code 2.16, Discrimination and Affirmative Action in Employment by Contractors, Subcontractors and Vendors
- King County Code 4.16, Emergency Purchases
- King County Code 10.80, Seattle/King County Health Department
- King County Code 12.52, Emergency Powers
- King County Code 15, Airport
- King County Code 17.04, Fire Code
- King County Code 21A, Zoning
- King County Executive Order ACO 8-1-29, Delegation of authority during absence and line of succession

- King County Ordinance 12163, Emergency Management Procedures including Emergency Purchases Authorization, Contract Waivers, Emergency Powers, Continuity of Government
- Seattle/King County Board of Health Code Title 10

10.4 - Seattle (Seattle Municipal Code = SMC)

- The Charter of the City of Seattle
- SMC Title 10.02, Health and Safety – Civil Emergencies
- SMC Title 10.06, Emergency Control of Drainage Problems, Earth Movement, Mud Flows, Wind-storm Damage and Other Hazards
- SMC Title 10.26, Quarantine Regulations
- SMC Title 12a.26, Mayor’s Emergency Powers
- SMC Title 21, Utilities
- SMC Title 22, Building and Construction Codes
- SMC Title 23, Land Use Code
- SMC Title 25, Environmental Protection and Historic Preservation

10.5 - Washington

- RCW 4.24.314, Hazardous Materials – Responsible Party
- RCW Chapter 4.24.470, Liability of Officials and Members of Governing Body of Public Agency -- Definitions
- RCW 4.24.480, Liability of state hazardous materials planning committee and local emergency planning committees
- RCW 10.93, Washington Mutual Aid Peace Officers Power Act
- RCW 18.39, Embalmers – Funeral Directors
- RCW 18.71, Physicians
- RCW 18.73, Emergency Medical Care and transportation services
- RCW 34.05, RCW Administrative Procedures Act

- RCW 35.33.081, Emergency Expenditures – Nondebatable Emergencies
- RCW 35.33.101 as amended, Emergency Warrants
- RCW 36.39, Counties - Assistance and relief
- RCW 36.40, Counties – Budget
- RCW 36.70A, Growth Management Act
- RCW 38.08, Powers and duties of Governor
- RCW 38.12, Militia officers
- RCW 38.52, Emergency Management
- RCW 38.54, Fire Mobilization
- RCW 38.52.070, Local Organization and Joint Local Organizations Authorized – Establishment, Operation – Emergency Powers, Procedures
- RCW 38.52.110, Use of Existing Services and Facilities – Impressments of Citizenry
- RCW 39.34, Public Contracts and Indebtedness – Interlocal Cooperation Act
- RCW 42.14, Continuity of Government Act
- RCW 42.17, Public Disclosure
- RCW 43.06, Governor’s Emergency Powers
- RCW 43.20, State government, executive - State Board of Health
- RCW 43.21G.040, Governor’s Energy Emergency Powers
- RCW 43.43, Washington State Patrol – State Fire Service Mobilization Plan
- RCW 43.105, Washington State Information Services Board (ISB)
- RCW 49.60.400, Discrimination, Preferential Treatment Prohibited
- RCW 49.70, Worker and Community Right to Know Act
- RCW 68.08, Human Remains (Rolled into RCW 68.50)
- RCW 68.50, Human Remains

- RCW 68.52, Public Cemeteries and Morgues
- RCW 70.02, Medical Records – Health care information and access
- RCW 70.05, Local Health Departments, Boards, Officers – Regulations
- RCW 70.58, Vital Statistics
- RCW 70.102, Hazardous Substances Information
- RCW 70.105, Public Health and Safety
- RCW 70.136, Hazardous Materials Incidents
- RCW 70.136.050, Good Samaritan Law
- RCW 80.01, Utilities and Transportation Commission
- RCW 80.36, Telecommunications
- RCW Chapter 80.50, Siting Energy Facilities
- RCW 81.77, Solid Waste Collection Companies
- RCW 90.48, Water pollution control
- RCW 90.56, Oil and hazardous substance spill prevention and response
- WAC 118, Military Department (emergency management)
- WAC 118-04, Emergency Worker Program
- WAC 118-30, Local Emergency Management/Services Organizations, Plans & Programs
- WAC 118-40, Community Right to Know Act
- WAC 173-180D, Facility Oil Handling Standards for Class 1 and 2 Facilities
- WAC 173-303, Dangerous waste regulations
- WAC 173-350, Washington State Solid Waste Handling Standards
- WAC 173-351, Washington State Criteria for Municipal Solid Waste Landfills
- WAC 246-100, Communicable Diseases

- WAC 246-101 Notifiable Conditions
- WAC 246-320, Hospital Licensing Regulations
- WAC 246-500, Handling Human Remains
- WAC 296-62, General Occupational Health Standards
- WAC 296-824, Labor and Industries – Emergency Response
- WAC 308-48, Licensing – Funeral Directors and Embalmers
- WAC 468-200, Conduct and Management of emergency air operations, air search and rescue and rescue/disaster relief
- WAC 480-120, Telephone Companies

10.6 - Federal

- Continuity of Operations Federal Preparedness Circular 65
- Homeland Security Act of 2002
- Homeland Security Presidential Directive/HSPD-5, Management of Domestic Incidents (NIMS)
- Homeland Security Presidential Directive/HSPD-8, National Preparedness
- HR 3858, Pets Evacuation and Transportation Standards (PETS) Act of 2006
- National Response Framework
- Presidential Decision Directive 39 (PDD-39), U.S. Policy on Counterterrorism (June 21, 1995)
- Presidential Decision Directive 62 (PDD-62), Protection against Unconventional Threats to Homeland and Americans Overseas (May 22, 1998)
- Presidential Decision Directive 63 (PDD-63), Protecting America’s Critical Infrastructure (May 22, 1998)
- Post-Katrina Emergency Reform Act of 2006
- Public Law 93-288, Disaster Relief Act of 1974, as amended by Public Law 100-707, the Robert T. Stafford Disaster Relief and Emergency Assistance Act

- Public Law 96-342, Improved Civil Defense Act of 1980, as amended
- Public Law 99-499, the Community Right to Know Act, Superfund Amendments and Re-Authorization Act of 1986 (SARA Title III)
- Public Law 101-336, Americans With Disabilities Act of 1990 (amended by PL 110-35)
- Public Law 104-201, Defense against Weapons of Mass Destruction Act of 1996
- Public Law 105-19, Volunteer Protection Act of 1997
- Public Law 105-381, Pacific Northwest Emergency Management Arrangement
- Public Law 106-390, Disaster Mitigation Act of 2000
- Public Law 109-295, Section 689, Individuals with Disabilities
- Public Law 110-35, Americans with Disabilities Act Amendments Act of 2008
- Public Law 920, Federal Defense Act of 1950, as amended
- CFR 29.1910 Subpart H, Labor and Hazardous Materials
- CFR 33.49, Hazardous Materials
- CFR 40(I)(J).300, National Oil and Hazardous Materials Contingency Plan
- CFR 44.301, Civil Defense-State and Local Emergency Management Assistance Program (EMA)
- USC 5.552(b)(7)(E), Freedom of Information Act Disclosure Exemption
- USC 18.1750178, Biological Weapons Anti-Terrorism Act (BWAT)
- USC 18.2332a, Weapons of Mass Destruction
- USC 33.1251 et seq., Clean Water Act of 1948, as amended in 1972, 1977 and 1987
- USC 42.116(I) – Public Health and Welfare, Community Right to Know, Emergency Planning and notification
- USC 42.264, Public Health and Welfare
- USC 42.300f-300j-26, Federal Safe Drinking Water Act of 1974, as amended in 1996

- USC 42.6901, Resource Conservation and Recovery Act
- USC 42.7401-7671q, Clean Air Act of 1970, as amended in 1977 and 1990
- USC 49.4101-5127, Hazardous Materials Transportation Act of 1994

11.0 - Appendices

11.1 - Appendix 1 - Scenario Description

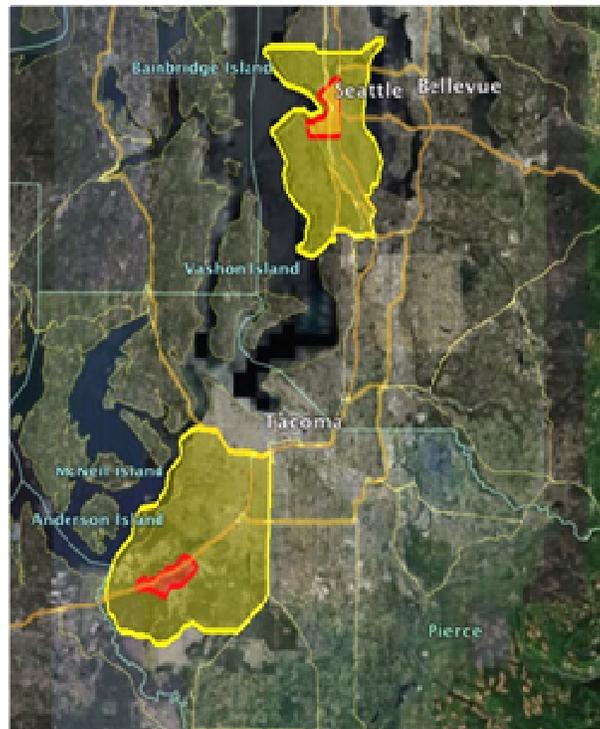
Day 0-30

Day One of the Attack: In the early morning hours of a workweek day in early July, the downtown core of the City of Seattle and the area surrounding and on the Joint Base Lewis-McChord (JBLM) installation in Pierce County were the targets of an aerosolized anthrax attack organized by a terrorist group. Laboratory tests confirmed that anthrax was released. It was later determined that a few non-descript trucks released aerosolized anthrax while driving through the downtown Seattle core and near the JBLM. Hundreds of thousands of people were exposed.

One Week after Attack: The President and the Washington State governor have declared a state of emergency, which has led to significant federal support on the scene. Provisions of the Stafford Act have been enacted, thereby freeing significant federal resources and assistance for the response and recovery efforts.

- Most individuals who develop signs and symptoms of disease live or work in King County. Commuters and tourists from across the region, the state, the country, and the world were exposed, and many will become ill. Symptomatic people, as well as those fearful of exposure, present at ambulatory care sites and in emergency rooms throughout the Puget Sound region in the weeks following the attack.
- Area ambulatory care sites and hospitals are forced into surge operations. Public health officials across the state recommend that anyone who was in the Seattle core area or near JBLM receive either vaccination or antibiotic treatment. Public health officials immediately requested push packages from the Strategic National Stockpile. Antibiotics and vaccines, which are effective forms of prevention and treatment for the majority of people exposed, are in ample supply. Medications are distributed through large employers, pharmacy chains, clinics, and hospitals.
- The initial hot zones in Seattle and JBLM are controlled by National Guard and law enforcement. Public health recommends that the zones be cleared of all non-essential persons. People outside the heavily contaminated areas generally obey cordon orders. Law enforcement is able to maintain civil order.
- No additional attacks have been reported, and the Federal Bureau of Investigation (FBI) has been throwing all its resources at these two incidents.
- Major transportation corridors through Seattle, JBLM, and the Port of Seattle are closed.

- The vast majority of people living and working in the cordoned areas in Seattle and surrounding JBLM have self evacuated; many require housing, employment, and financial assistance. Nearly 100,000 homeless persons and vulnerable populations within King and Pierce counties do not have the means to self-evacuate; their health is at risk.
- Area command structures have been established in all impacted jurisdictions. JBLM is in command of response activities on base. JBLM locked down, limiting access to essential personnel. A Joint Field Office (JFO) has been established, as has the Washington Recovery Organization (WRO). Thousands of federal responders will be sent to the area for the long-term recovery process. Agencies involved include the Departments of Defense (DOD), Homeland Security (DHS), Justice, and HHS as well as the EPA. Fear is high; Seattle is inundated with national and international media which is constantly covering the situation. Most of the medical information is accurate.



One Month after the Attack: Although prophylaxis did occur, thousands of people died, and thousands remain seriously ill. Major transportation corridors through Seattle and JBLM are open.

In Seattle:

- Hospitals and major medical facilities near the contamination zone are financially strapped and struggling to survive. Essential services are running at minimal levels, including Emergency Management Services, hospitals near the hot zone, utilities, law enforcement, and others.
- Decontamination efforts will begin at the outer perimeter of the contaminated area, pushing cleanup toward the most contaminated portions of the city. Some private building owners have initiated cleanup of their facilities, resulting in significant volumes of contaminated waste piling up in the city waiting for decisions regarding disposal.
- Questions regarding “how safe is safe” and “how clean is clean” are being debated but are not resolved.
- Several square miles of the downtown core of Seattle remain contaminated. Most buildings in the Seattle core are empty. Seattle streets are abandoned except for emergency and cleanup crews. Many Seattle roadways have been closed, and traffic is moving through defined areas.
- The WRO is making decisions with respect to remediation and restoration and recovery priorities.
- Seattle City government and King County government have been reconstituted elsewhere in King County.
- Businesses in the Seattle core have relocated their staff to alternate sites or have failed. Tourism across the State of Washington is lost. The Port of Seattle operations are severely limited. The few trucks departing the Port go through the Metro bus wash as a precaution and to provide confidence to others that shipments are not contaminated. Metro buses are moving on limited routes around the contaminated zone in the city.
- Looting is escalating, and safety is becoming more of an issue. Law enforcement personnel must accompany any remediation workers into buildings to provide safety and security.
- Area command has transitioned from response to recovery and is being supported by local emergency operations.
- A joint decontamination station is established at the perimeter of the zone. Seattle Police Department (SPD) has their own decontamination stations to maintain the security of weapons, etc. Personnel require decon every time they leave the zone. In the zone, personnel are constrained. A decision needs to be made if people can eat. If someone is injured in the zone, they go through a decontamination transfer.
- An issue will arise when the decision has to be made about whether decon is a higher priority than life safety. Normally, a heart attack would be an extremely high priority,

but if that means a new hospital will require cleanup, is that worth it? As the hot zone shrinks, some of those procedures will change.

- Response and recovery will overlap substantially. Cleanup and recovery are expected to take between 5 and 10 years, while the economy of the urban area, state, and Pacific Northwest may remain distressed for many more years. The region will continue to experience contamination for many years after response and recovery and may be considered a special environment for Department of Health recommendations. Anthrax will be persistent but stabilized after about 30 days in the environment.
- Public discontent and concern are growing that economic recovery will not be achieved because of limited operation of the Port of Seattle.
- Morbidity and mortality rates are highly variable but significant.
- Jurisdictions outside of the contaminated area request financial assistance for the “anthrax refugees” who have left the contaminated area and relocated to their areas.

JBLM/Pierce County: JBLM is restricted to essential personnel only. Facilities on base and businesses, homes, and rentals in a mile radius surrounding the base are all contaminated or suspected to be contaminated. The military has initiated decontamination and cleanup operations on base. Waste is piling up onsite until decisions regarding disposal of waste potentially containing anthrax.

11.2 - Appendix 2 - Description of the Region

County	Population	Geography	Schools	Economy	Transportation	Infrastructure
King	1,900,000	2,126 sq mi	464 Total (K - 12)	Largest in WA	I-5, I-405, I-90	Level 3 neonatal unit; Level 1 adult and pediatric trauma care and burn unit; Seattle Children's Hospital
	15/40 Largest cities	Seattle = 84 sq mi; 2 Islands	13 Universities	Port is largest in WA; 1,226 vessels, \$39 billion in cargo (2008)	900,000 commuters; WSF; Sea-Tac - 32 million (2007)	
Pierce	813,600	1,806 sq mi	208 Total (K - 12)	70% Port traffic is international; 70% of marine cargo to lower 48 and Alaska goes through Tacoma	I-5, WA-512, WA-167, WA-16	Joint Base Lewis-McChord, Camp Murray, Madigan Army Hospital; WA EOC; State Correctional Facility
	4/40 Largest cities	3 Islands	3 Universities		Intermodal Rail	
Snohomish	683,655	2,196	248 Total (K-12)	Port of Everett + High Tech + Naval Station Everett	I-5, Significant commuting; WSF Edmonds/Kingston & Mukilteo/Clinton crossings = 35 % ferry traffic	Naval Station Everett, 3 major hospitals, Boeing's Paine Field + aircraft testing and manufacturing site
	6/40 Largest cities	3 Islands	2 Universities			
Island	81,000	9 islands; Whidbey and Camano primary population centers	28 (K - 12)	Defense Spending: Naval Station Whidbey (6,000 AD, 1,400 DoD); tourism; Boeing	County Transit System; WSF; No major highways	Naval Station Whidbey (Includes U.S. Naval Hospital); 1 Primary Hospital
Kitsap	232,000	566 sq mi	109 (K - 12)	Defense Spending and Tourism	State Route 3, 16, 303, 304, 307, 104; State Highway 101. State 16	Puget Sound Naval Shipyard Bremerton; Naval Undersea

County	Population	Geography	Schools	Economy	Transportation	Infrastructure
		2 Islands	Largest HS in State		to I-5; WSF Seattle to Bainbridge/Bremerton, Kingston-Edmonds, W. Seattle-Vashon-Southworth	Warfare Center at Keyport; Naval Base Kitsap (formerly NSB Bangor & Naval Station Bremerton; U.S. Naval Hospital; Harrison Hospital
Mason	57,000	1,051 sq mi	23 (K - 12)	2 Ports (Allyn/Shelton); Tourism; Industrial Park w/small airport; Port of Shelton Foreign Trade Zone	State Route 3; U.S. Highway 101	Mason General Hospital
Thurston	245,000	774 sq mi	87 (K - 12)	Government Spending (State Capital is Olympia); Health Care; Technology; Trade; Construction	I-5; U.S. Highway 12, 101; State Route 507, 510	State Capital; Providence St. Peter's Hospital
			3 Universities			
Skagit	118,000	1,920 sq mi	57 (K - 12)	Agriculture; Fishing; Timber; Manufacturing; Petroleum	I-5; State Route 9, 20; WSF Service to San Juan Islands and British Columbia	Island Hospital; Skagit Valley Hospital; United General Hospital; WSF dock to British Columbia
			1 University			

11.3 - Appendix 3 - Description of ICS Elements – From NIMS

Multi-Agency Coordination (MAC) Groups: A MAC structure is one possible way to handle resource coordination between various jurisdictions and interests. Typically, Agency administrators/Executives, or their designees, who are authorized to represent or commit agency resources and funds are brought together to form MAC Groups. MAC Groups may also be known as multiagency committees, emergency management committees, or as otherwise defined by the system. Personnel assigned to the EOC who meet the criteria for participation in a MAC Group may be asked to fulfill that role.

A MAC Group does not have any direct incident involvement and may often be located some distance from the incident site(s). In many cases a MAC Group can function virtually to accomplish its assigned tasks.

A MAC Group may require a support organization for its own logistics and documentation needs; to manage incident-related decision support information such as tracking critical resources, situation status, and intelligence or investigative information; and to provide public information to the news media and public. The number and skills of its personnel will vary by incident complexity, activity levels, needs of the MAC Group, and other factors identified through agreements or by preparedness organizations. A MAC Group may be established at any level (e.g., national, State, or local) or within any discipline (e.g., emergency management, public health, critical infrastructure, or private sector).¹⁸

Area Commands: Area Command is an organization to oversee the management of multiple incidents handled individually by separate ICS organizations or to oversee the management of a very large or evolving incident engaging multiple Incident Management Teams (IMTs). An Agency administrator/Executive or other public official with jurisdictional responsibility for the incident usually makes the decision to establish an Area Command. An Area Command is activated only if necessary, depending on the complexity of the incident and incident management span-of-control considerations.

Area Commands are particularly relevant to incidents that are typically not site-specific, are not immediately identifiable, are geographically dispersed, and evolve over longer periods of time (e.g., public health emergencies, earthquakes, tornadoes, civil disturbances, and any geographic area where several IMTs are being used and these incidents are all requesting similar resources). Incidents such as these, as well as acts of biological, chemical, radiological, and

¹⁸ NIMS, 67

nuclear terrorism, require a coordinated intergovernmental, non-governmental organization, and private-sector response, with large-scale coordination typically conducted at a higher jurisdictional level. Area Command is also used when a number of incidents of the same type in the same area are competing for the same resources, such as multiple hazardous material incidents, spills, or fires.

When incidents are of different types and/or do not have similar resource demands, they are usually handled as separate incidents or are coordinated through an EOC or MAC Group. If the incidents under the authority of the Area Command span multiple jurisdictions, a Unified Area Command should be established, allowing each jurisdiction to have appropriate representation in the Area Command.

Area Command should not be confused with the functions performed by MACS: Area Command oversees management coordination of the incident(s), while a MACS element, such as a communications/dispatch center, EOC, or MAC Group, coordinates support.¹⁹

¹⁹ NIMS, 62

11.4 - Appendix 4 - Acronyms

Acronym	Meaning
ADA	Americans with Disabilities Act
ARNORTH	U.S. Army North
AWARE	Analyzer for Wide Area Restoration Effectiveness
CAP	Control, Assessment, and Preservation
CDC	U.S. Centers for Disease Control and Prevention
CEMP	Comprehensive Emergency Management Plan
CIKR	Critical infrastructure and key resources
ConOps	Concept of Operations
DHS	U.S. Department of Homeland Security
DMORT	Disaster Mortuary Operational Response Team
DOD	U.S. Department of Defense
DTRA	Defense Threat Reduction Agency
ECC	Emergency Coordination Center
EOC	Emergency Operations Center
EPA	U.S. Environmental Protection Agency
FBI	Federal Bureau of Investigation
FCO	Federal Coordinating Officer
FDA	U.S. Food and Drug Administration
FEMA	Federal Emergency Management Agency
HHS	U.S. Department of Health and Human Services
HUD	U.S. Department of Housing and Urban Development

Acronym	Meaning
IBRD	Interagency Biological Restoration Demonstration
ICS	Incident Command System
IMT	Incident Management Teams
IND	Industry New Drug (Protocols for approval)
JBLM	Joint Base Lewis-McChord
JFO	Joint Field Office
JIC	Joint Information Center
JIS	Joint Information System (composed of multiple JICs)
MAC	Multi-Agency Coordination (System or Committee)
ME	Medical Examiner
NIMS	National Incident Management System
OTC	Over the Counter
PAO	Public Affairs Officer
PATH	Prioritization Analysis Toolset for All-Hazards
PIO	Public Information Officer
PNNL	Pacific Northwest National Laboratory
PPE	Personal Protective Equipment
QA	Quality Assurance
RAP	Remediation Action Plan
RCPG	Regional Catastrophic Planning Grant
RCW	Revised Code of Washington
RRTF	Regional Recovery Task Force (Concept)

Acronym	Meaning
RSF	Recovery Support Function
RTF	Recovery Task Force (Concept)
SOP	Standard Operating Procedure
TWG	Technical Working Group
UASI	Urban Area Security Initiative
USDA	U.S. Department of Agriculture
VOAD	Volunteer Organizations Active in Disaster
VRC	Volunteer Reception Center
WAC	Washington Administrative Code
WRO	Washington Recovery Organization (Concept)
WSF	Washington State Ferries